MI-NADONA RN Boot Camp Pain Management Update April 30, 2024

Linda Vanni, MSN, PMGT-BC, ACNS-BC, NP, AP-PMN

Nurse Practitioner, Pain Management

Professional Pain Education & Consulting, LLC

Objectives

- **Describe the effect that the pandemic has had on the world of pain management and the opioid epidemic.**
- **State the importance of multi-modal, individualized pain management in the elderly patient.**
- **Identify the elements of implicit bias in pain management.**
- **List two reasons why medical marijuana is not currently allowed in the long-term care setting.**

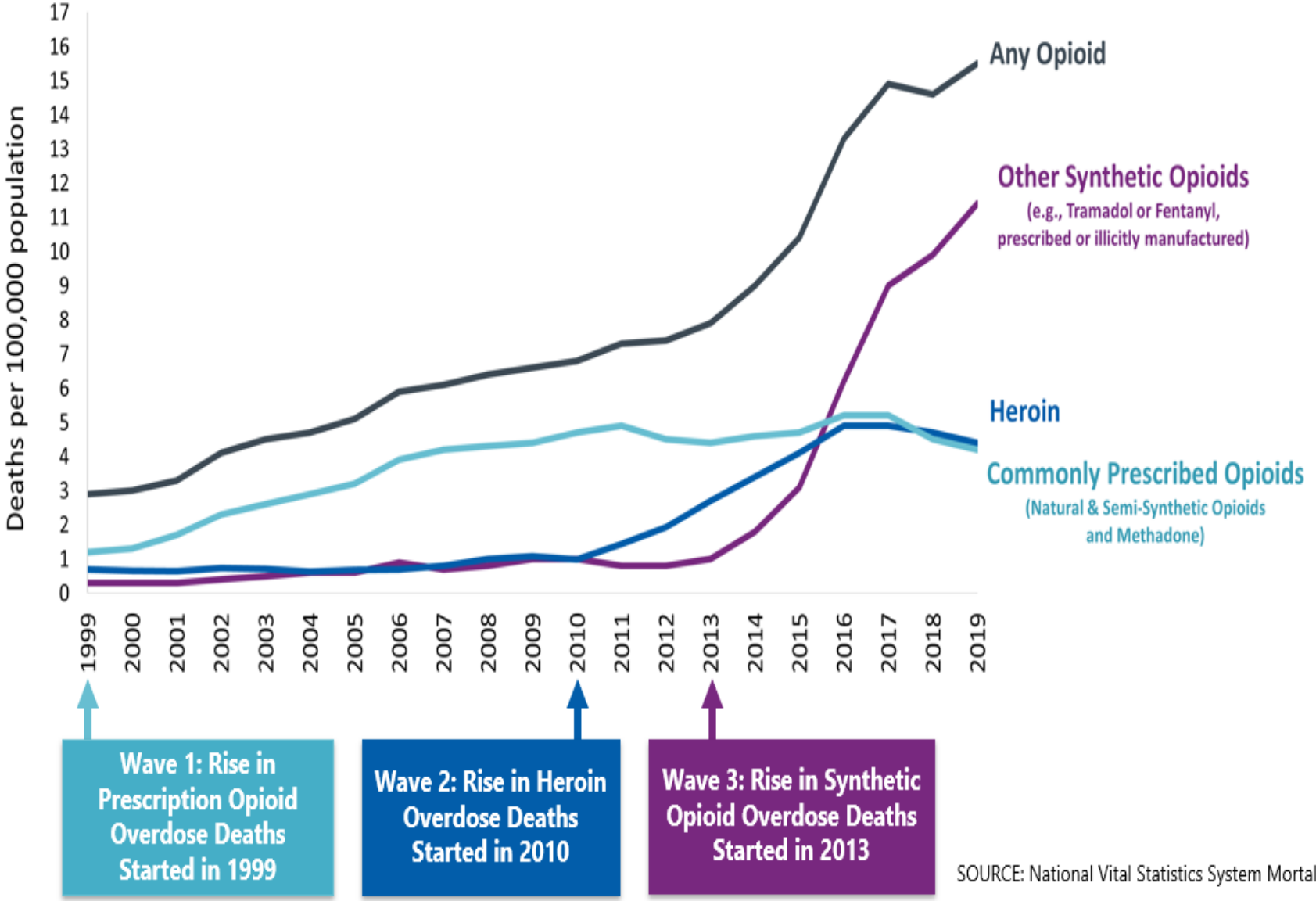
Michigan Educational Requirements for License Renewal

*Each medical doctor is required to complete 150 hours of continuing education in courses or programs approved by the board of which a minimum 75 hours of the required 150 hours must be earned in courses or programs designated as Category 1 programs. A minimum of 1 hour of continuing education must be earned in the area of medical ethics. Effective December 6, 2017 **a minimum of 3 hours of continuing education must be earned in the area of pain and symptom management.**

*Under **Michigan** law, all RNs and LPNs are **required** to complete 25 **continuing education** contact hours, **with two hours of pain and symptom management, during the two years preceding application for license** renewal. A one-time Human Trafficking **CE** is also **required**.

***R 338.7004 Implicit bias training standards** Rule 4. 1) Beginning June 1, 2022 and for every renewal cycle thereafter, shall have completed a **minimum of 1 hour of Implicit bias training for each year of the applicant's license or registration cycle. RNs two hours required.**

Three Waves of the Rise in Opioid Overdose Deaths



SOURCE: National Vital Statistics System Mortality File.

THE HILL

CMS tweaks opioid proposal after backlash

The agency had received pushback on a proposal that would have meant a prescription for high doses of opioids (90 milligrams of morphine per day or more) automatically wouldn't be filled and the patient would need special permission from their private insurance company in order to receive the medication.

By Andrew Joseph Feb. 10, 2022

In a victory for pain experts, CDC tones down its opioid prescribing guidelines

PROCESS TIMELINE

Updating the CDC Guideline for Prescribing Opioids

AHRQ – Agency for Healthcare Research & Quality

BSC/NCIPC – Board of Scientific Counselors of the National Center for Injury Prevention and Control

CDC – Centers for Disease Control and Prevention

FRN – Federal Register Notice

HHS – U.S. Department of Health and Human Services

OWG – Opioid Workgroup

Fentanyl

- **Fentanyl and Other Synthetic Opioids**:
  - primarily sourced from China and Mexico
  - the most lethal category of opioids used in the United States
  - Traffickers— wittingly or unwittingly— are increasingly selling fentanyl to users without mixing it with any other controlled substances and are also increasingly selling fentanyl in the form of counterfeit prescription pills
  - Fentanyl suppliers will continue to experiment with new fentanyl-related substances and adjust supplies in attempts to circumvent new regulations imposed by the United States, China, and Mexico.

Xylazine

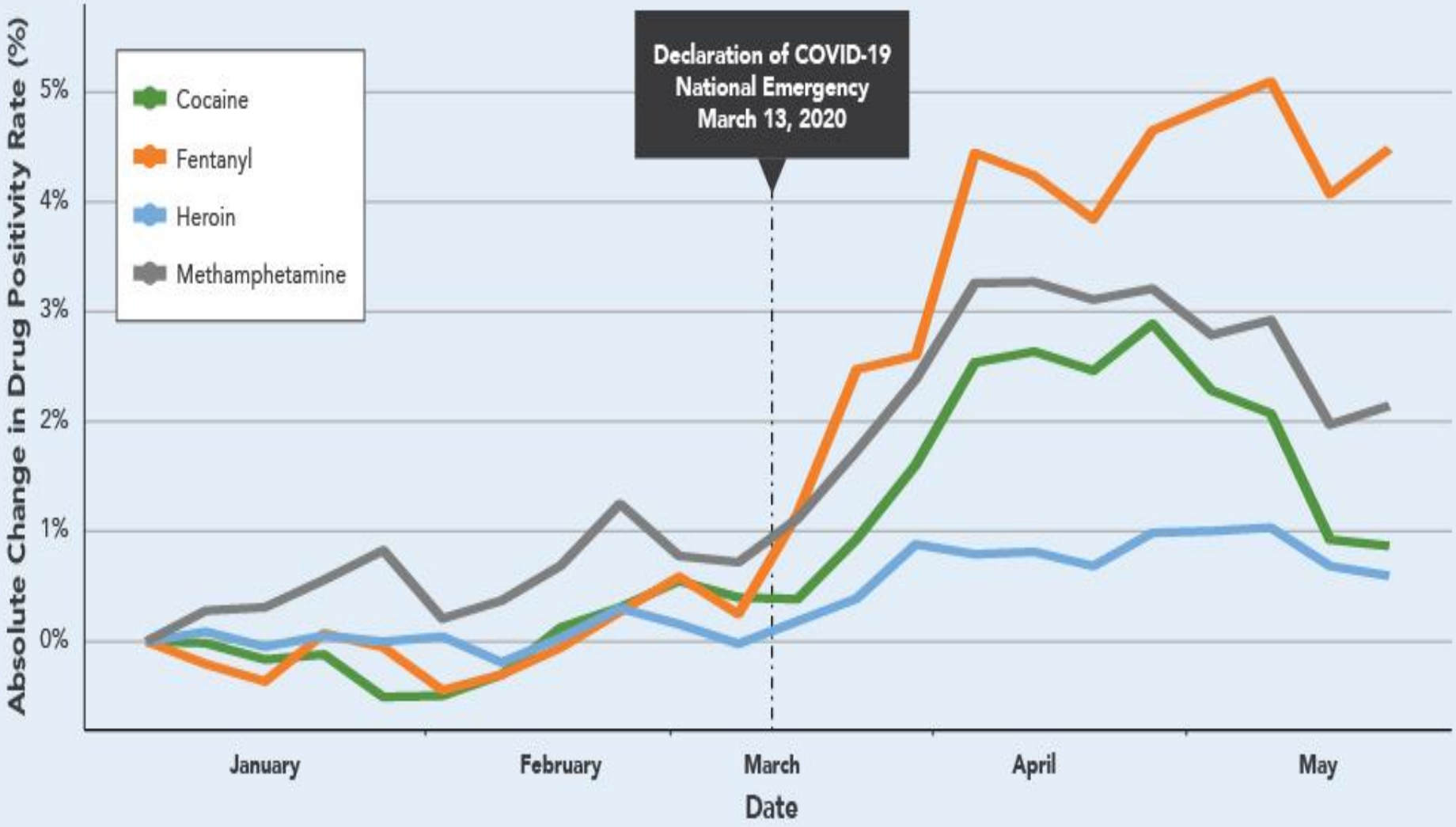
- Emerging Trend: Xylazine in Michigan 2019-2022 Year-to-Date
- Xylazine is a potent veterinary tranquilizer/sedative
- Never approved for human use
- increasingly found in illicit drug supply
- Frequently used along with fentanyl
- Causes sedation, anesthesia, respiratory depression, slow heart rate, muscle relaxation, potentiates pain relief
- **Might be underreported in overdose deaths**
- **Michigan is also seeing Xylazine-involved fatalities**
- As of September 2022, 206 xylazine-positive decedents, **100% also tested positive for fentanyl.**

COVID-19 and the opioid crisis: When a pandemic and an epidemic collide

STACY WEINER, SENIOR STAFF WRITER
JULY 27, 2020

- Researchers say it's too soon to have definitive data on the pandemic's effects, but early numbers are concerning. So far, alcohol sales have risen by more than 25%. A recent analysis of 500,000 urine drug tests by Millennium Health, a national laboratory service, also showed worrisome trends: an increase of 32% for nonprescribed fentanyl, 20% for methamphetamine, and 10% for cocaine from mid-March through May. And suspected drug overdoses climbed 18% in the same period, according to a national tracking system run out of the University of Baltimore.

Total Study Population Change in Unadjusted Positivity Rate for Cocaine, Fentanyl, Heroin and Methamphetamine



Other Covid Pain Issues

- Shifting of staff to Covid frontlines
- Travel nurses, staffing issues
- **Not a priority any more**
- Uncontrolled acute pain can manifest into chronic pain
  - Can delay discharge
- High anxiety group normally, isolation
- Insurance company issues
  - Patients not aware of telemedicine coverage
  - Some insurers did not abide by Cares Act rules

Long Hauler's Covid Syndrome

TAKE CONTROL OF PAIN DURING COVID-19

THE ACTION PLAN CHRONIC PAIN PATIENTS NEED NOW

KNOW THE STATS & FACTS

- A US Pain Foundation 2020 survey found that chronic pain patients:
  - are experiencing increased pain
  - are facing barriers to treatment – including coverage for telemedicine and prescribed medications
  - consider themselves to be at high risk for serious COVID-19.
- Pain-related conditions that may put people at higher risk of COVID-19 infection and complications include:
  - *inflammatory disorders* such as rheumatoid arthritis, psoriatic arthritis, ankylosing spondylitis, systemic lupus erythematosus, inflammatory bowel disease, Sjogren's syndrome
  - *connective tissues diseases* such as systemic sclerosis and vasculitis
  - *neurological disorders* such as multiple sclerosis
- At-Risk individuals should:
  - wash their hands often.
  - have adequate supplies on hand.
  - keep space between themselves and others, especially in public.
  - avoid crowds and non-essential travel.

COMPARE YOUR SYMPTOMS

NEW CHEST PAIN

Chest pain can occur as a result of an anxiety disorder (eg, a panic attack), a cardiac event (eg, a heart attack), or a non-cardiac event. Note that chest pain is a rare symptom of COVID-19 and usually does not occur as the sole symptom. Shortness of breath and/or signs of upper respiratory infection (eg, coughing, phlegm) may also be present, but this is not always the case.

No matter the cause, *any* type of chest pain warrants immediate medical attention.

NEW/ENHANCED MUSCLE OR JOINT PAIN

Chronic muscle and joint pain may be exacerbated during times of increased stress, such as in the pandemic environment. COVID-19-related muscle pain is more likely to occur in multiple muscles and to be associated with fever, chills, insomnia, headache, and sore throat.

OTHER CONCERNING SYMPTOMS?

Use the CDC self-checker at www.cdc.gov/coronavirus

BUST MEDICATION MYTHS

MYTH: Stopping my routine medications will prevent me from getting COVID-19.
Reality: Most medications should *not* be abruptly discontinued as this can exacerbate systemic disease. If you are concerned about obtaining medications or managing pain flares, ask your doctor or pharmacy about home delivery and alternative medication choices.

MYTH: I should discontinue my immunosuppressant drugs.
Reality: The American College of Rheumatology (ACR) has issued clinical guidance that individuals with stable rheumatic/immune disease *can continue* taking hydroxychloroquine or chloroquine, sulfasalazine, methotrexate, leflunomide, other immunosuppressants (eg, tacrolimus, cyclosporine, mycophenolate mofetil, azathioprine), biologics (including infusions), JAK inhibitors, and non-steroidal anti-inflammatory drugs (NSAIDs). If you have been exposed to or contracted COVID-19, your doctor may pause these treatments.

MYTH: If I have coronavirus symptoms or contract COVID-19, I should not use NSAIDs to reduce fever or pain.
Reality: Some have suggested that NSAIDs can mask fever and delay a COVID-19 diagnosis. Although all anti-inflammatories (and acetaminophen) are expected to reduce fever, the FDA and WHO have concluded that there is *no evidence* that NSAIDs worsen COVID-19 symptoms or impact survival. If you rely on these medications for pain, ask your doctor about use and alternative options. If you do contract the virus *and* have severe respiratory symptoms, ACR recommends ceasing NSAIDs.

MYTH: Steroid injections put me at risk for infection or complications.
Reality: This can be true, as corticosteroids may inhibit immune response, especially at higher doses. Most medical organizations have recommended that corticosteroids not be injected into joints or soft tissues during the pandemic. If you rely on steroids for back or arthritis pain, discuss risks and temporary alternatives with your pain specialist.

MAXIMIZE TELEMEDICINE

AVOID THE RISK of contracting the coronavirus by using video and phone calls to ask your health-related questions.

USE VIRTUAL VISITS for all types of care, including regular communication with your doctor or nurse practitioner, clinical pharmacy evaluations to go over medications, specialty evaluations, guided physical therapy sessions, and telepsychiatry.

CHECK WITH YOUR INSURANCE provider to confirm coverage. Due to the declared public health emergency, many companies have broadened coverage.

PREEMPT PAIN FLARES

- *STICK TO YOUR MEDICATION REGIMEN:* Avoid hoarding or saving pills "for later" and avoid using muscle relaxers or antidepressants as "chill-out" pills.
- *MANAGE STRESS LEVELS AND MENTAL HEALTH:* Stress reduction and behavioral treatments are key to soothing the central nervous system and pain response. Find time to take mental health breaks daily (see ideas at right).
- *TRY HOME CARE DEVICES:* TENS units, vibration devices (eg, Vibra-cool), analgesic balms or rubs (eg, Biofreeze), heat or ice packs, digital light therapy, and other digital gear can deliver drug-free pain relief.
- *MAINTAIN PHYSICAL ACTIVITY:* Home-based exercise programs are available virtually and can continue under the guidance of your doctor. Wear comfortable clothes, consider home massage to alleviate flares, and build in a variety of exercises. Consider doing strength and balance activities to stay strong and reduce the risk of falling. Seek medical advice if you experience chest pain, dizziness, or sickness during exercise.
- *KEEP YOUR DIET IN CHECK:* High-fiber foods, such as whole grains, legumes, nuts, and seeds, as well as omega-3 fats, can help lower inflammation. It's also important to avoid weight gain, which can exacerbate pain.

SOURCES: US Pain Foundation, Chronic Pain & Covid-19 Survey Report, April 15, 2020. / CDC, Testing for COVID-19 webpage. Accessed May 1, 2020. / Yang W, et al. Clinical characteristics and imaging manifestations of the 2019 novel coronavirus disease (COVID-19): a multi-center study in Wenzhou city, Zhejiang, China. *J Infection.* 2020;80(4):388-393. / Mikuls TR, et al. ACR guidance for the management of adult patients with rheumatic disease during the COVID-19 pandemic. *Arthritis Rheumatol.* ePub Apr. 29, 2020.

TAKE MENTAL HEALTH BREAKS

- *MOVE:* If you have reduced mobility, stepping outside to get fresh air can reduce anxiety or negative thinking.
- *BREATHE:* Practice deep breathing and relaxation exercises. Consider meditation, music therapy, and virtual reality programs to promote mindfulness.
- *CONNECT:* Chronic pain and illness can be debilitating and cause significant social isolation by itself. Find resources, support groups, and individuals to connect with virtually during this crisis to help regulate your mood and pain symptoms. Try a gratitude journal to divert negative thoughts.
- *CREATE:* Start or strengthen an artistic hobby to distract from ongoing pain.
- *LEARN:* Behavioral strategies to reduce mind-body stress, such as Cognitive Behavioral Therapy.

REVIEWED BY
Michael R. Clark, MD, MPH
Tina Doshi, MD, MHS
Jeffrey Fudin, PharmD, DAIPM, FCCP
Jeff Gudin, MD
Don L. Goldenberg, MD
Anita Gupta, DO, PharmD, MPP
Tiziano Marovino, DPT

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PPM
PRACTICAL PAIN MANAGEMENT

Other Issues

- **Able to order controlled substances via telemedicine**
- **CII up to 90 day supply**
- **Federal requirements for in person visits waved**
- All patients should get naloxone order
- Avoid steroid injections
- Unable to attend PT
- Video exercising
- No current clinical studies on NSAIDs increase Covid severity
- Re-assure patients concerns about care
- Disparities

National Institute of Neurological Disorders and Stroke

Disparities in Pain Care

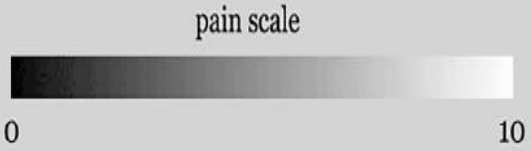
Research shows that certain racial/ethnic and socioeconomic groups are more vulnerable to poor pain care and management. This infographic describes some factors that contribute to disparities in pain care.

Disparities in Pain Care Logo

Bias in Pain Treatment

Across the lifespan and regardless of socioeconomic status, blacks are less likely than whites to receive analgesic medication for pain[1-3]

Primary care providers are more likely to underestimate pain intensity in blacks than in other sociodemographic groups[2,4]



Compared with white patients, black patients were more likely to have:[5]

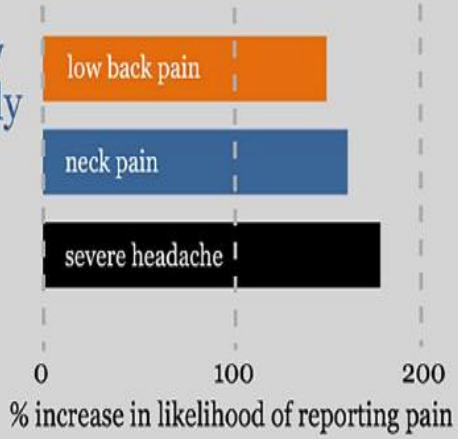
- more referrals for substance abuse assessment

- fewer referrals to a pain specialist

- increased drug urine tests

Socioeconomic Status

People with incomes below poverty level are more likely to report pain[1,3]



During ER visits, opioids were prescribed more frequently to patients with the highest socioeconomic status[3]

Language Barriers

Less than 20% of health professionals treating Hispanic pain patients reported Spanish proficiency at an advanced level[7]

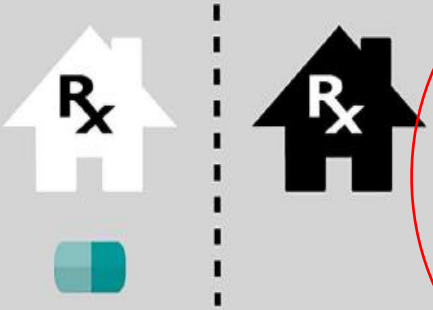
Non-native English speakers may have:[6]

- limited health literacy

- difficulties navigating the healthcare system

- difficulties understanding healthcare providers

Access to Care



Pharmacies located in minority neighborhoods are less likely to carry sufficient prescription analgesics than those located in white neighborhoods [6]

Impoverished individuals and minorities are more likely to be uninsured or underinsured than non-minorities and people with greater incomes [2]

Reduced access to health care in general, and specialty care in particular, contributes to pain disparities, with racial and ethnic minorities and the poor having decreased access to care [2]

Learn More...

The above information points to a need for a multidisciplinary approach to pain care and treatment including clinicians' awareness of implicit bias. An IOM report on relieving pain in America (see references) called for a comprehensive population health-level strategy for pain, which is currently in progress under the Dept. of Health and Human Services.

Resources for persons with pain:
- Find a doctor
  http://healthfinder.gov/
- Talking with your doctor
  http://www.nih.gov/clearcommunication/talktoyourdoctor.htm
  https://nccih.nih.gov/timetotalk/forpatients.htm
- Learn more about chronic pain
  http://www.ninds.nih.gov/disorders/chronic_pain/detail_chronic_pain.htm

Resources for care providers:
- Cultural & linguistic competency
  http://minorityhealth.hhs.gov/omh/browse.aspx?lvl=2&lvlid=34
  http://www.hrsa.gov/publichealth/healthliteracy/
  http://www.nih.gov/clearcommunication/culturalcompetency.htm

References

1. Institute of Medicine. Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research. 2011, The National Academies Press. Washington, DC.

2. Anderson, K.O., C.R. Green, and R. Payne, Racial and ethnic disparities in pain: causes and consequences of unequal care. J Pain, 2009. 10(12): p. 1187-204.

3. Joynt, M., et al., The impact of neighborhood socioeconomic status and race on the prescribing of opioids in emergency departments throughout the United States. J Gen Intern Med, 2013. 28(12): p. 1604-10.

4. Tait, R.C. and J.T. Chibnall, Racial/ethnic disparities in the assessment and treatment of pain: psychosocial perspectives. Am Psychol, 2014. 69(2): p. 131-41.

5. Hausmann, L.R., et al., Racial disparities in the monitoring of patients on chronic opioid therapy. Pain, 2013. 154(1): p. 46-52.

6. Bekanich, S.J., et al., A multifaceted initiative to improve clinician awareness of pain management disparities. Am J Med Qual, 2014. 29(5): p. 388-96.

Research, Standards and Guidelines for Safe Clinical Practice

- AMA Opioid Task Force Helping Guide (August 2018 update)
- American Pain Society guidelines (2016)
- ANA Position Statement on Ethical Pain Management (2018)
- Numerous guidelines for special populations and conditions,
- ASPMN (2018)
- Revised Joint Commission pain standards (2018)
- CMS Guidelines, finalized (2018)

Editorial > J Am Med Dir Assoc. 2021 Dec;22(12):2407. doi: 10.1016/j.jamda.2021.10.008.

Pain Management in the Post-acute and Long-Term Care Setting: A Clinical Practice Guideline (CPG) from the Society for Post-acute and Long-Term Care Medicine (AMDA)

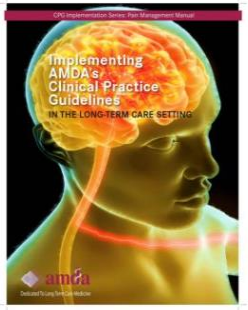
Steve Levenson [1], Barbara Resnick [2], Suzanne Cryst [3], Rebecca Ferrini [4], Robert Hogikyan [5], Renante Ignacio [6], Paula E Lester [7], Vycki Nalls [8], Fiona Okoroti [9], Nancy K Overstreet [10]

Affiliations + expand

PMID: 34823854 DOI: 10.1016/j.jamda.2021.10.008

PAIN MANAGEMENT CPG IMPLEMENTATION MANUAL

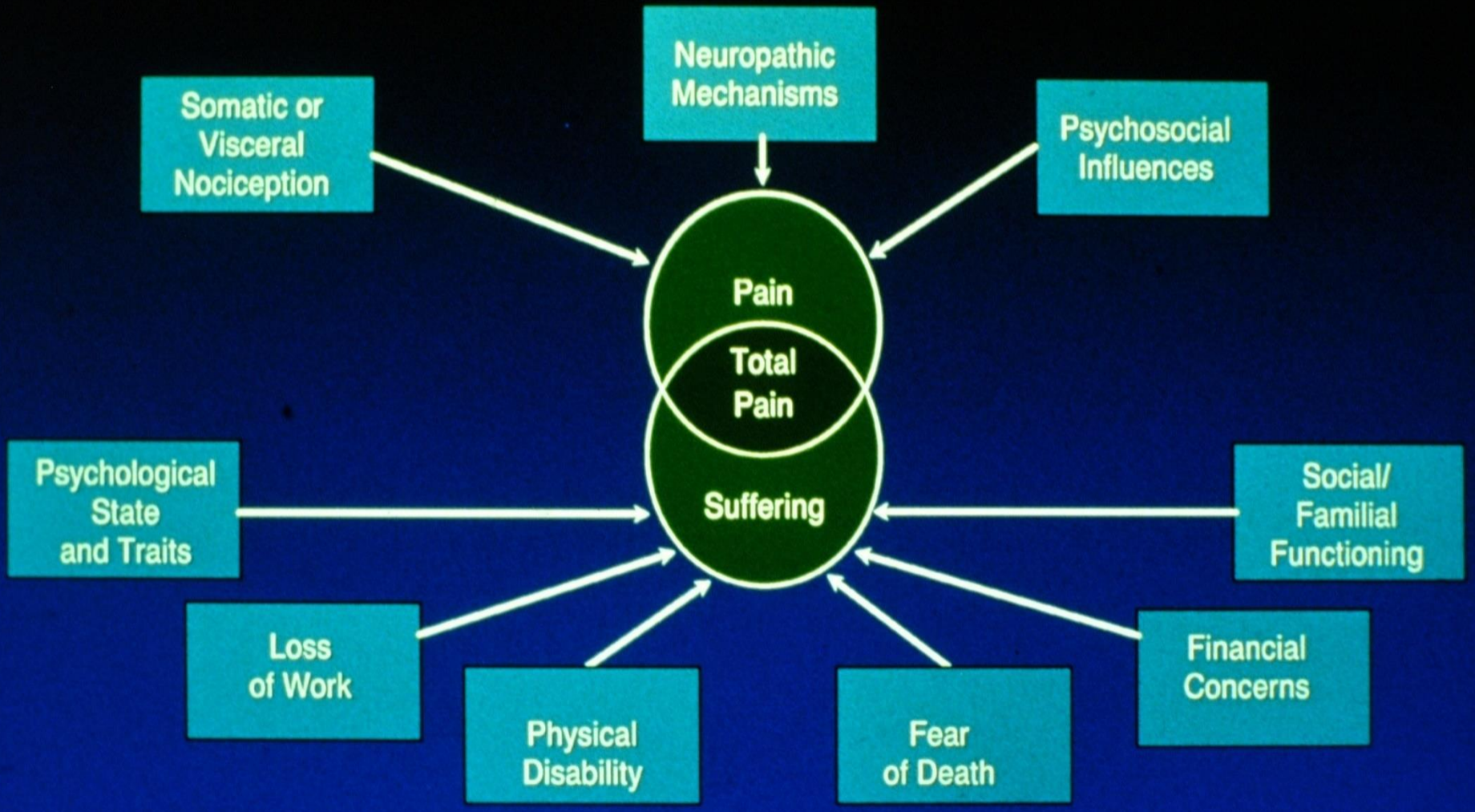
Pain Management
Allied Health Professional, NP/PA, Physician



This implementation manual delineates a systematic, well-planned implementation process for implementing the Pain Management Clinical Practice Guideline (CPG). It is designed to assist physicians, nurses and advanced practitioners to support evidence-based clinical and management decision-making. It is intended to accompany the Pain Management CPG developed by AMDA in order to facilitate its implementation and sustained use in the health care setting.

The manual encourages health professionals to improve their treatment practices to be:

Multifactorial Nature of Pain



(Adapted from Portenoy, 1988)

Tolerance, Physical Dependence & Addiction

- Tolerance
  - Effects diminish over time. Tolerance is not an inevitable consequence of chronic opioid therapy

- Physical dependence
  - A predictable physiological response that occurs with continuous use
  - Manifest by symptoms of withdrawal if use is abruptly discontinued or an antagonist is given
  - Taper the dose to prevent withdrawal

- Addiction
  - A primary, chronic, neurobiologic disease: impaired control over drug use, compulsive use, craving and continued use despite harm
  - Addiction is a complex condition, a brain disease that is manifested by compulsive substance use despite harmful consequence

American Psychiatric Association, 2017

Pseudo Addiction

- "Addiction-like" behavior may signal inadequate pain control or intensification, progression of pain

Addictive Disease
SUD

- Chronic, relapsing, treatable, **disease**
- Characteristics
  - **Impaired control over drug use**
  - **Compulsive use**
  - **Continued use despite harm**
  - **Craving**
- Research shows strong association between stress and drug craving, and pain may contribute to increased stress

(NIDA, 2021)

The modern ethics dilemma: Opioids for pain management in drug abuser

Mak Wen Yao , 07 Nov 2017

- Travis Rieder, is a research scholar at the Berman Institute of Bioethics at Johns Hopkins University. He wrote "if opioids prevent significant suffering from pain, then the solution to the prescription opioid problem cannot simply be to stop using them. To do so would be to trade one crisis (an opioid crisis) for another (a pain crisis)."

- In the face of debilitating pain, the guiding principle for doctors and other allied health professionals is "to do good" – beneficence that takes patients best interest as the treatment priority.
- In the end, we should acknowledge that the opioid crisis has presented a sophisticated moral dilemma that could not be resolved easily.

Assessment

- The gold standard of pain management assessment is the patient self report on a pain scale from 0 to 10
- The goal of pain management is an awake, alert, functional patient
- Determine if patient is opioid naïve or opioid tolerant

Opioid Naïve: Patients who do not meet the definition of opioid tolerant.

Opioid Tolerant: Patients who are taking at least 60 mg of oral morphine/day, 25 mcg transdermal fentaNYL/hour, 30 mg oral oxyCODONE/day, 8 mg oral HYDROmorphone/day, 25 mg oral oxymorphone/day or an equianalgesic dose of another opioid for one week or longer.

- Set realistic expectations from the beginning, sit down with the patient, evaluate if the patient is currently having pain

- Excellent pain management utilizes adjuvant therapies

Definition of Pain

"Pain is whatever the experiencing person says it is, existing whenever he or she says it does."

- Margo McCaffery, R.N., M.S., FAAN

Chronic pain is classified as pain with a duration of greater than 6 months.

Recognition of pain is key!!!

2nd Step of Hierarchy:

In patients who are unable to self-report, assess for

BEHAVIORS

that may indicate the presence of pain, not the intensity!

Assume Pain is Present

1. Unresponsive patients with underlying pathology thought to be painful (e.g., surgery, intubation, cancer).
2. Patients undergoing painful activities or procedures (e.g., turning, PT, wound care, ambulation) who are premedicated with the goal of preventing pain, increases potential for improved participation.

- Document pathology or activity.

All about Function

- Patient examinations in physical therapy include, but are not limited to, testing of muscle **function**, **strength**, joint **flexibility**, range of motion, **balance** and **coordination**, posture, respiration, skin integrity, **motor function**, quality of life, and **activities** of daily living.

APTA
American Physical Therapy Association

- Occupational therapy practitioners enable people of all ages to live life to its fullest by helping them promote health, and prevent—or live better with—injury, illness, or disability.

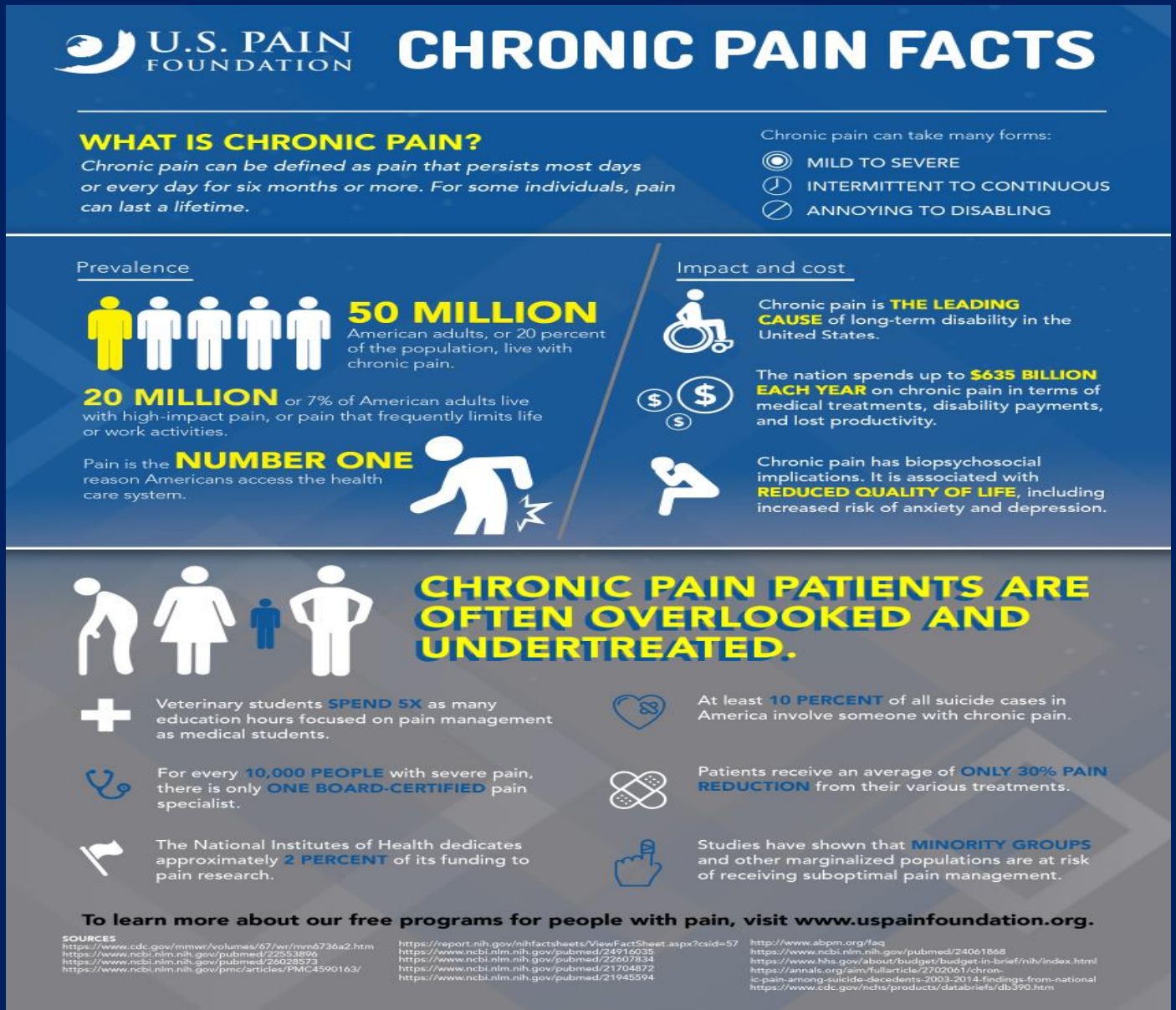
AOTA The American Occupational Therapy Association, Inc.

- To all the healthcare professionals practicing in the Rehab specialty including nurses, case managers, physical therapists, occupational therapists, and social workers.

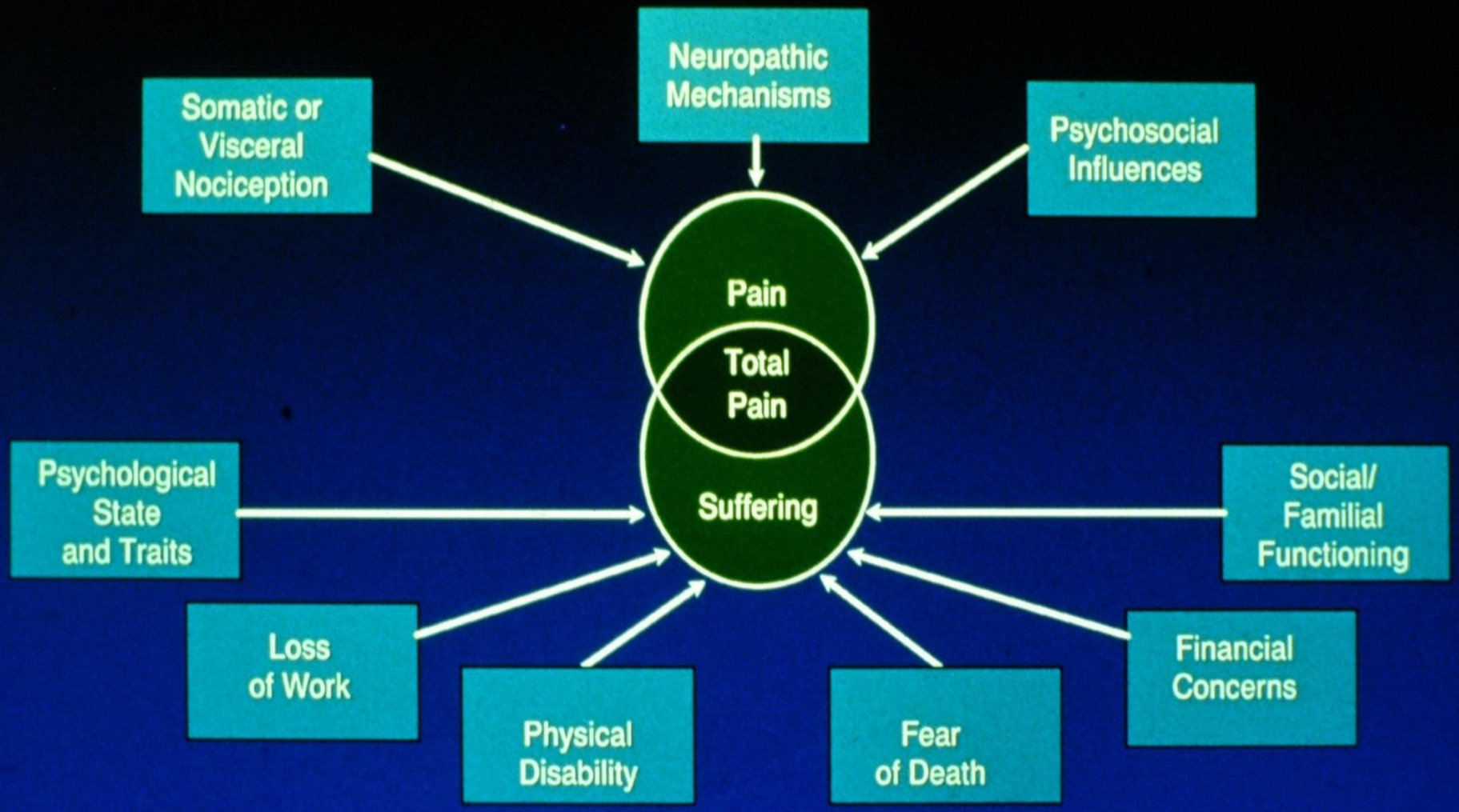
76.9 billion is spent on the diagnosis and management of low back pain & an additional $10-$20 billion is attributed to economic losses in productivity each year.

Institute of Health Metrics & Evaluation, 2020

Pain - By the numbers



Multifactorial Nature of Pain



(Adapted from Portenoy, 1988)

Different Types of Pain

Somatic – localized pain in skin, muscle, bone described as aching, stabbing, throbbing

- Therapies for somatic pain include NSAIDs (prostaglandin inhibitors), acetaminophen (works centrally), muscle relaxants, ice, and heat

Visceral – non-localized pain in organs or viscera described as gnawing, cramping, aching or sharp

- Therapies for visceral pain include opioids (occupies opioid receptors), and interventional therapies

Neuropathic – pain caused by nerve damage described as sharp, numbness, burning or shooting

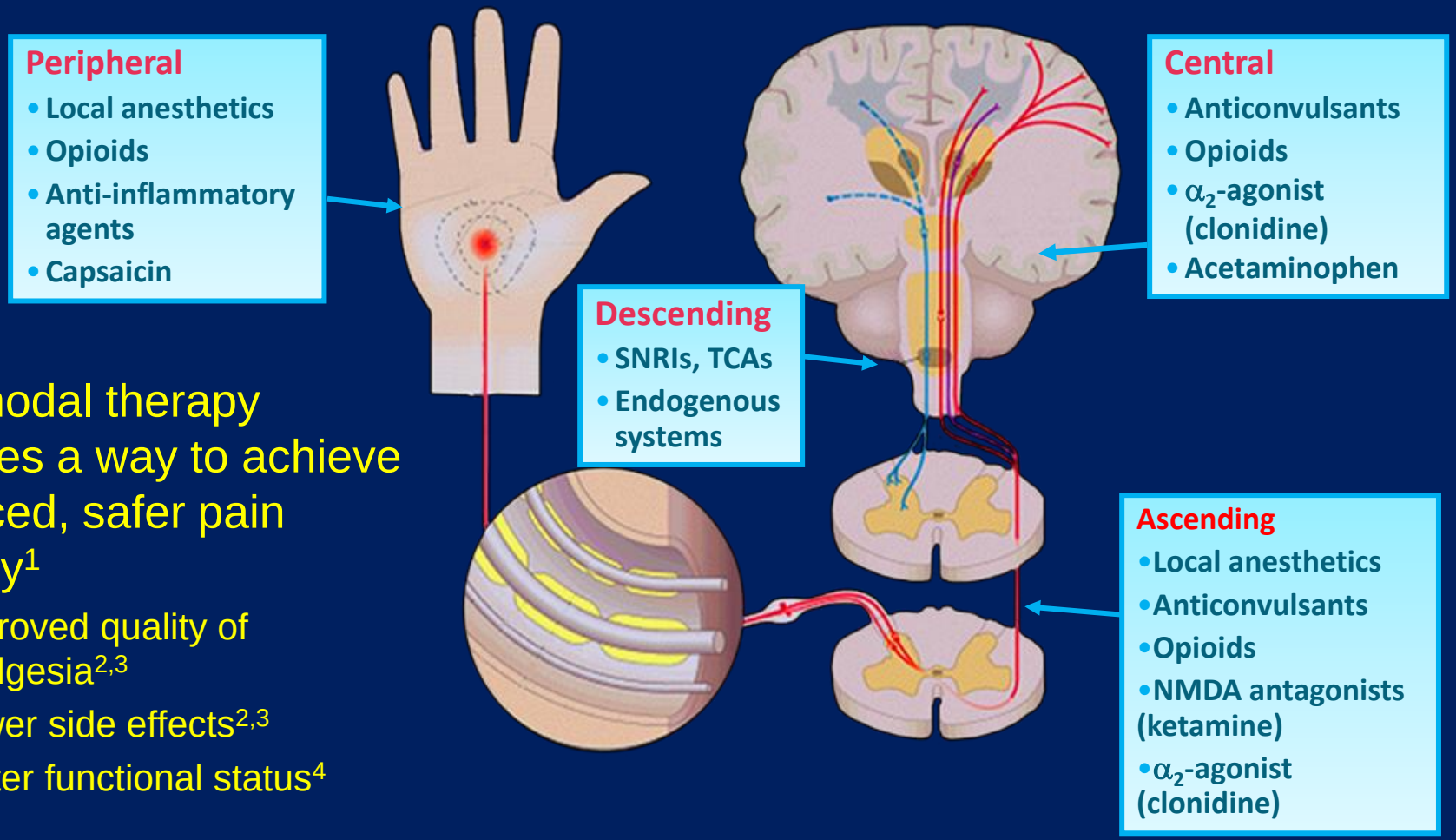
- Therapies for neuropathic pain include antidepressants (inhibits norepinephrine and serotonin re-uptake), anticonvulsants (blocks voltage-dependent calcium channels), local anesthetics, and interventional therapies **caution: anticonvulsants can cause dizziness, potential for falls. Start low and go slow!**

- Opioids are not the first-line medication choice for somatic or neuropathic pain

These types of pain can occur individually or in combination, example: surgical pain

Multimodal Pain Management Plan

Multimodal Therapy: Clinical Advantages



- Multimodal therapy provides a way to achieve balanced, safer pain therapy[1]
  - Improved quality of analgesia[2,3]
  - Fewer side effects[2,3]
  - Better functional status[4]

1. Gottschalk A, Smith DS. *Am Fam Physician.* 2001;63:1979-1984, 1985-1986.
2. Tiippana EM, et al. *Anesth Analg.* 2007;104:1545-1556.
34. Basse L, et al. *Brit J Surg.* 2002;89:446-453.

Adjuvant Analgesic Medications

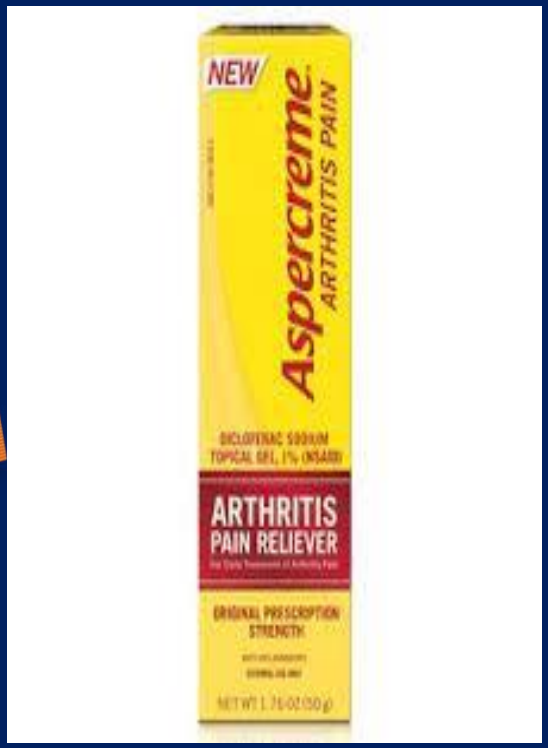
Drug Class	Medication Examples	Use	Clinical Pearls
Antidepressants	Amitriptyline Nortriptyline	Neuropathic Pain	SE: dry mouth, drowsiness, constipation, orthostatic hypotension, urinary retention, confusion. Obtain baseline EKG with history of cardiac disease
SSRI/SNRI Antidepressants	Duloxetine (Cymbalta)	Diabetic peripheral Neuropathy	Should not use with MAOI's (ex. Zyvox). Consider lower starting dose for patients for whom tolerability is a concern.
Antiepileptics	Gabapentin (Neurontin) Pregabalin (Lyrica)	Neuropathic Pain	Adjust Dose for renal Dysfunction. Pregabalin is similar to gabapentin, sometimes more rapid response than gabapentin.
Topical Preparations	Lidoderm patch (topical Lidocaine) Diclofenac Patch	Lidoderm- Neuropathic Pain Diclofenac- Bone Muscle pain	Patch may be cut to fit painful areas. Place only on skin that is clean, dry and intact.
Muscle Relaxants	Baclofen (Lioresal) Methocarbamol (Robaxin)	Muscle Spasm	Gradually increase in 2-4mg increments over 4 weeks.
NSAID	Ibuprofen Naproxen Ketorolac celecoxib	Mild to moderate pain.	Use extreme caution in elderly, cardiac disease, renal dysfunction, and GI bleeding.

OTC NSAIDs – Awareness of Patient Self-Medication

- NSAIDs ceiling effect must be monitored to avoid toxicity
- Combining NSAIDs increases potential adverse effects, which include:
  - Hepatic dysfunction
  - Bleeding
  - Gastric ulceration
  - Renal failure
- Patient education required for this important class of OTC drugs

Jacox et al (eds.). *Management of Cancer Pain. Clinical Practice Guidelines.* No. 9. 1994.

Diclofenac Patch & Cream

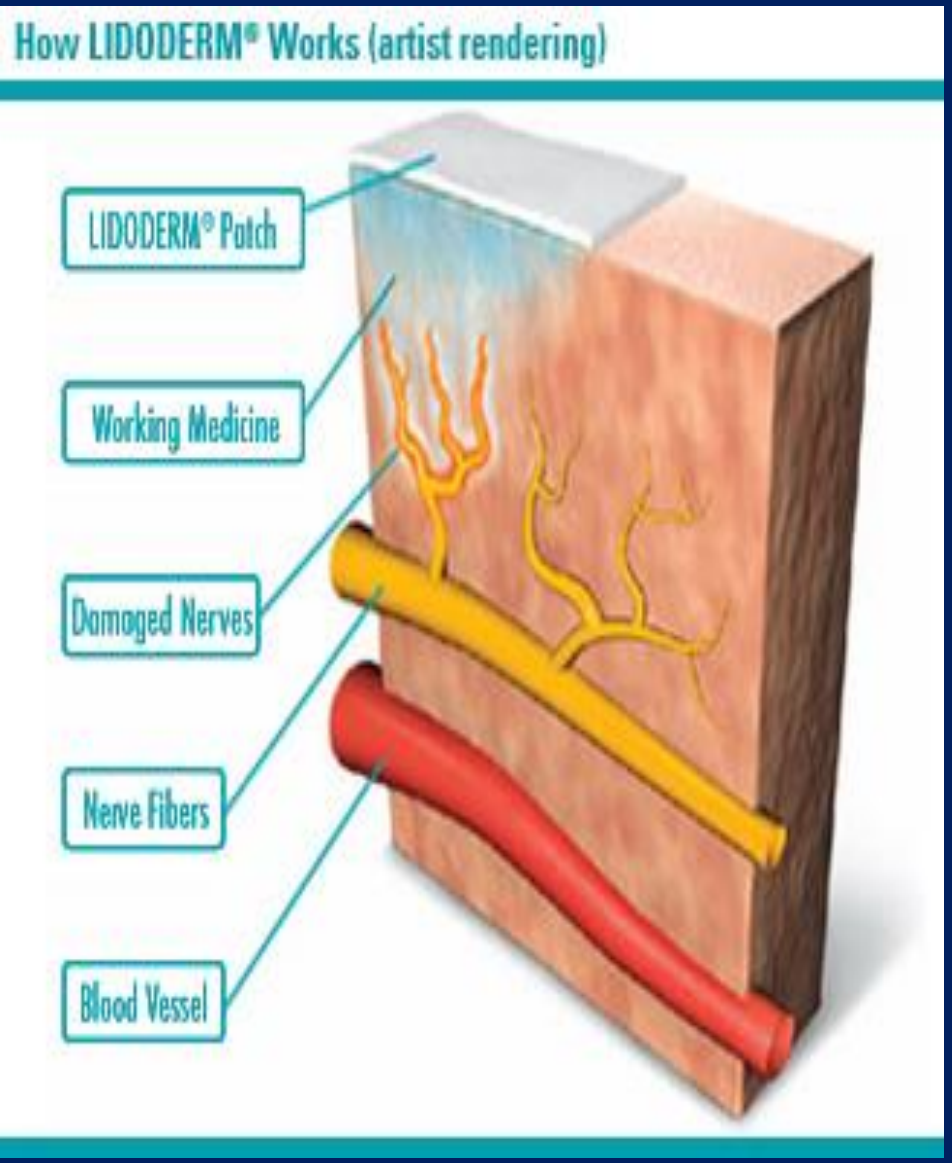


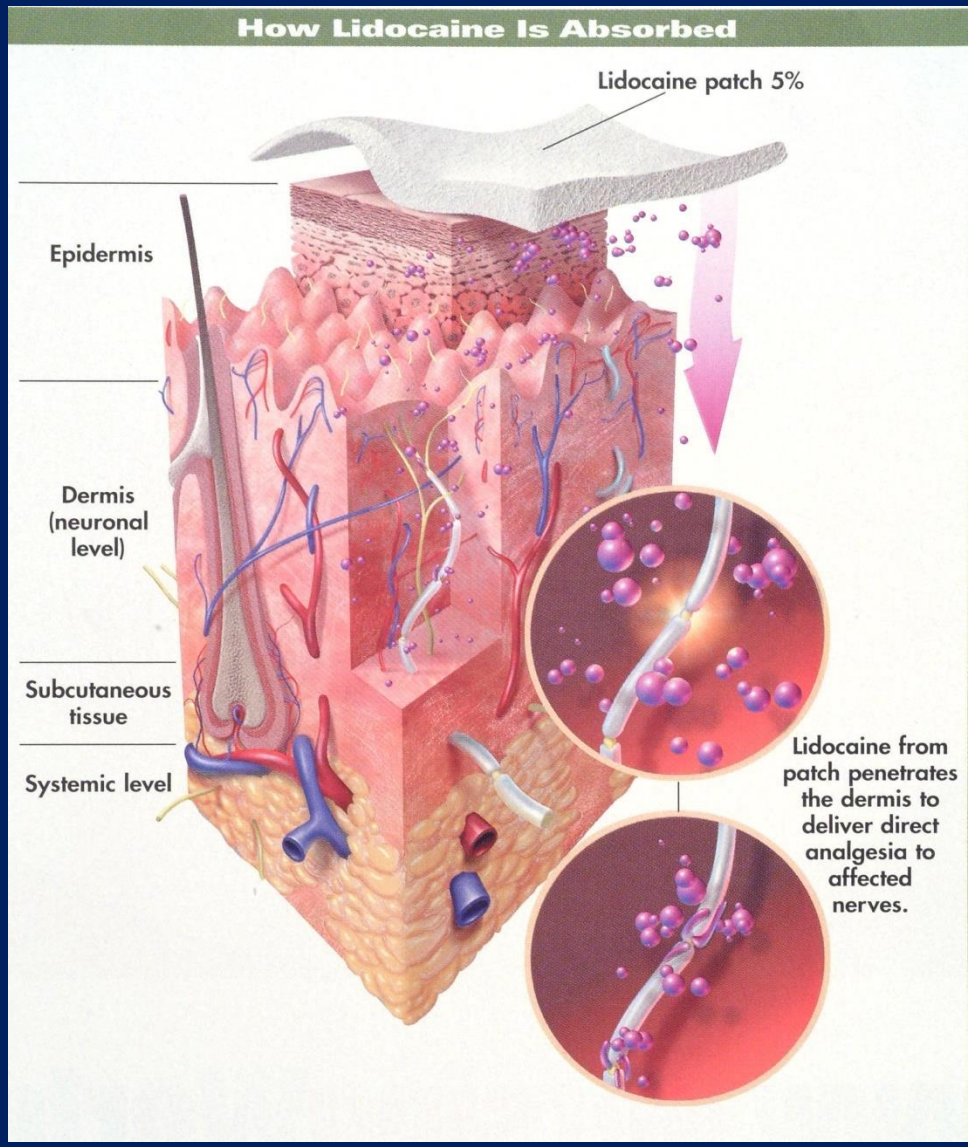
Local Anesthetics

Blocks conduction of nerve impulses by decreasing or preventing an increase in the permeability of excitable membranes to Na+.

(Catterall & Mackie, 1996)

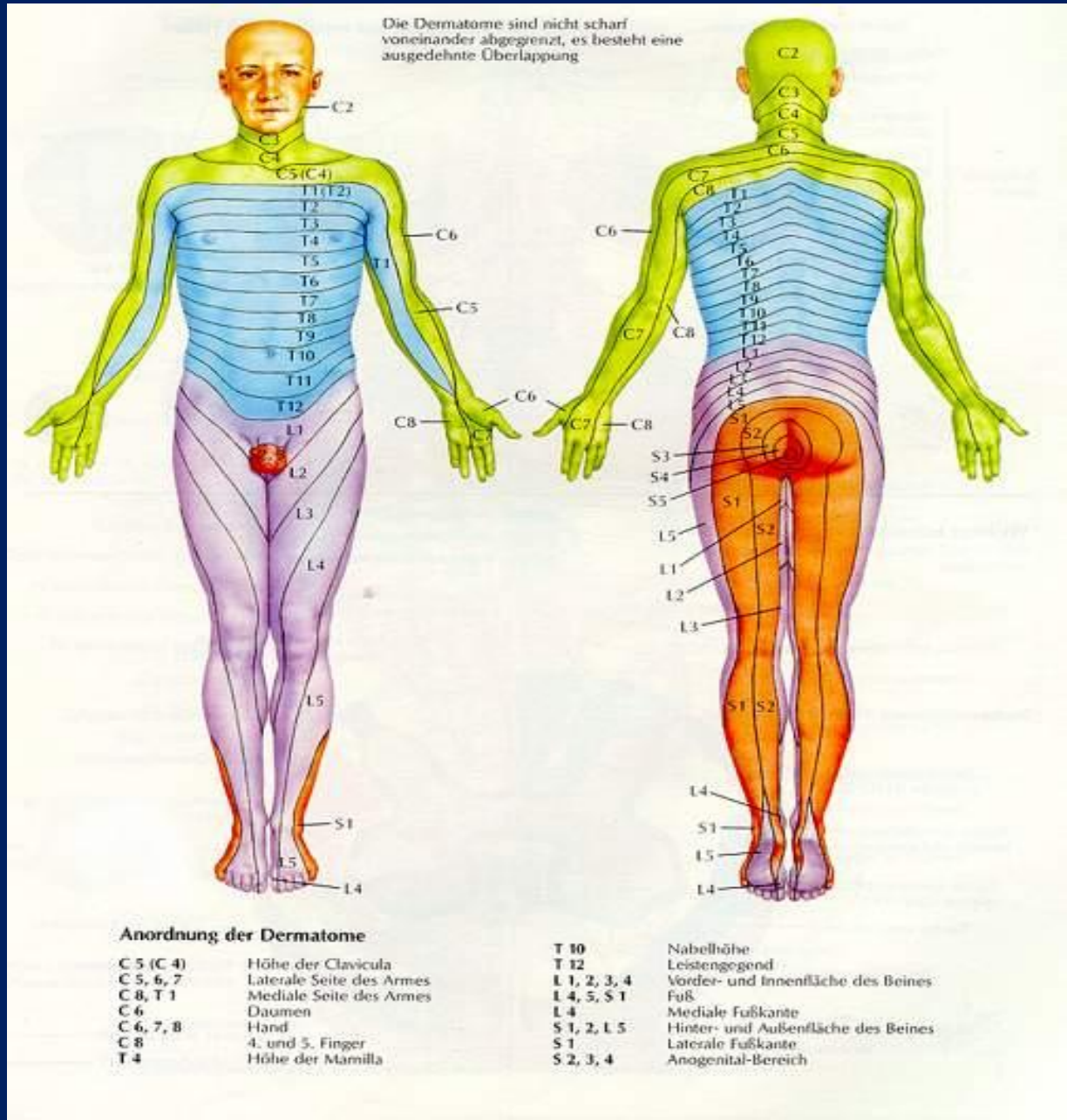
Lidoderm 5% Patch





Sensory Stimuli from Spinal Neurons

At each vertebral body level, nerve roots exit from the spinal cord bilaterally. Specific skin surface areas are innervated by a single spinal nerve or group of spinal nerves. These skin area are called dermatomes



Local Anesthetic Infusions

- Breakdown of cartilage at delivery catheter site and variability of dose infusion (Cons)
- Must be placed by skilled personal pre-op (Con)
- Excellent pain relief (Pro)

Acetaminophen

- Analgesic, antipyretic
- Well tolerated
- Used for both acute and chronic pain (Pros)
- Used to treat osteoarthritis
- Maximum dose 4000 mg/day, except w/ ETOH
- Inhibits prostaglandin synthetase in the CNS, weak peripheral anti-inflammatory activity, centrally acting, Reinforces the descending inhibitory serotonergic pain pathways (proposed)
- Risk of hepatotoxicity with higher doses, multiple combo products (Cons)
- Renal failure dosing based on creatinine clearance
- Moderately dialyzable
- Antidote – acetylcysteine (Mucomyst, Acetadote)

gabapentin abuse

- **Michigan Board of Pharmacy now reporting gabapentin on MAPS**
- **Gabapentin now classified as Schedule V controlled substance in Michigan**
- Ohio Substance Abuse Monitoring Network issued alert, February 2017
- Fifth most prescribed drug in nation (GoodRx)
- Can enhance euphoria caused by opioids and stave off drug withdrawals
- Bypasses the blocking effects of medications used for addiction treatment, enabling patients to get "high" while in recovery (STAT, 2017)
- 1/5 of those abusing opioids misuse gabapentin (Addiction, 2016)
- 300 mg pill sells for as little as 0.75 cents on the street

Tricyclic Antidepressants TCA

- **Amitriptyline (Elavil), 10 – 25 mg po hs, usual effective dose 50-150 mg po hs., metabolized CYP450: 1A2, 2D6 (primary), 3A4 substrate, active metabolites incl. nortriptyline. Inexpensive, moderately effective (Pros). High side effect profile (Con). Used for chronic neuropathic pain.**
- **Nortriptyline (Pamelor, Aventyl HCL),**

  10 – 25 mg po hs, usual effective dose 50 – 150 mg po hs, metabolized CYP450: 2D6 substrate, active metabolite.
- **Desipramine (Norpramin), 10 – 25 mg po hs, usual effective dose 50 – 150 mg po hs, metabolized CYP450: 2C19, 2D6 (primary) substrate; active metabolite. (McDonald & Portenoy, 2006)**

- **Nursing Leaders: Fall alert!!!!!**

Special Considerations in the Elderly

- Opioid naïve?
- Examine pain management techniques used prior to admission
- Avoiding Morphine in patient with low GFR
- Decreasing sleep medications
- Avoiding Benadryl and other sedating agents
- Increasing ROM
- Early Mobility
- Caution when using blocks
- Obesity
- Sleep apnea
- The Beer's Criteria

Beer's Criteria

- Created in 1991 to improve safety of med therapy in older adults
- Potentially inappropriate medication
  - All classes of medications
  - Evidence-based, graded tool
  - Assists health care providers in improving medication safety in the geriatric patient
  - Covers side effects and potential adverse effects
    - TCAs: strong anticholinergics
    - NSAIDS: high rate of GIB in pts receiving for 3-6 months

Opioid Therapy

Morphine is considered the “Gold Standard”

1:300 rule morphine conversion

- 1 mg of intrathecal morphine = 10 mg of epidural morphine = 100 mg of intravenous morphine = 300 mg of oral morphine

  (This is due to first pass effect)

When utilizing equianalgesic chart make sure to take into account incomplete cross tolerance due to genetic variances

There are several applications that can assist in conversion from one opioid to another

Genetic Polymorphism

UGT 1A1; involved in the glucuronidation of morphine, buprenorphine, and nalorphine.

UGT 1A3/1A4; glucuronidation of TCA.

UGT 2B7; glucuronidation of benzodiazepines.

Genetic polymorphism: population distribution for inheriting liver enzyme activity controlled by a single gene locus.

CYP 2C19 approx. 18% Japanese and African Americans, 3-5% of whites, poor metabolizers with higher plasma conc. of drug substrates.

Ex. Diazepam, imipramine, and phenytoin.

CYP2D6 7-10% whites, 1-4% African Americans inherit autosomal recessive allele on chromosome 22 results in poor metabolism with higher plasma conc., prolonged half lives. Ex. Codeine-cannot convert codeine to morphine, paroxetine, venlafaxine, fluoxetine, desipramine, imipramine, nortriptyline and oxycodone.

(Core, 2002), (Cleary & Hogan, 2007)

*****FDA Drug Safety Communications**

8/2012 Reviewing the safety of codeine administered post-tonsillectomy/adenoidectomy. 2/20/13 Black box warning issued. Deaths occurred in children ultra-rapid metabolizers with sleep apnea.

Guidelines

- “Start low and go slow”
  - Use longer dosing intervals
  - Use smaller doses
- Pharmacologic therapy is most effective when combined with nonpharmacologic therapy
- Acetaminophen
  - First line therapy
  - Consider ATC dosing
  - 3-4 grams/24hrs from all sources
- Nonsteroidal anti-inflammatory drugs
  - Should be used with caution, not recommended for the aged
  - Short term
- Opioid analgesics
  - Effective for relieving severe pain
  - Monitor for adverse effects

Reversal Agents

- **Naloxone (pure opioid antagonist)**

  Extremely short half life, 1.07-1.53h, normally longer than opioid being reversed. In the inpatient hospital setting (excludes ER), intravenous route, an ampule of naloxone (0.4mg/ml is diluted with 9 mls of saline for a final concentration of 0.04mg/ml). Initial dose of 2-3 mls administered and then titrated for effect to reverse opioid sedation. Caution: Because of short life of naloxone, opioid half life is longer and additional doses of naloxone maybe required. Patient must be continually monitored.

- **Flumazenil (benzodiazepine antagonist)**

  Reversal agent for benzodiazepines, binds to benzodiazepine receptors, enhances GABA effects.

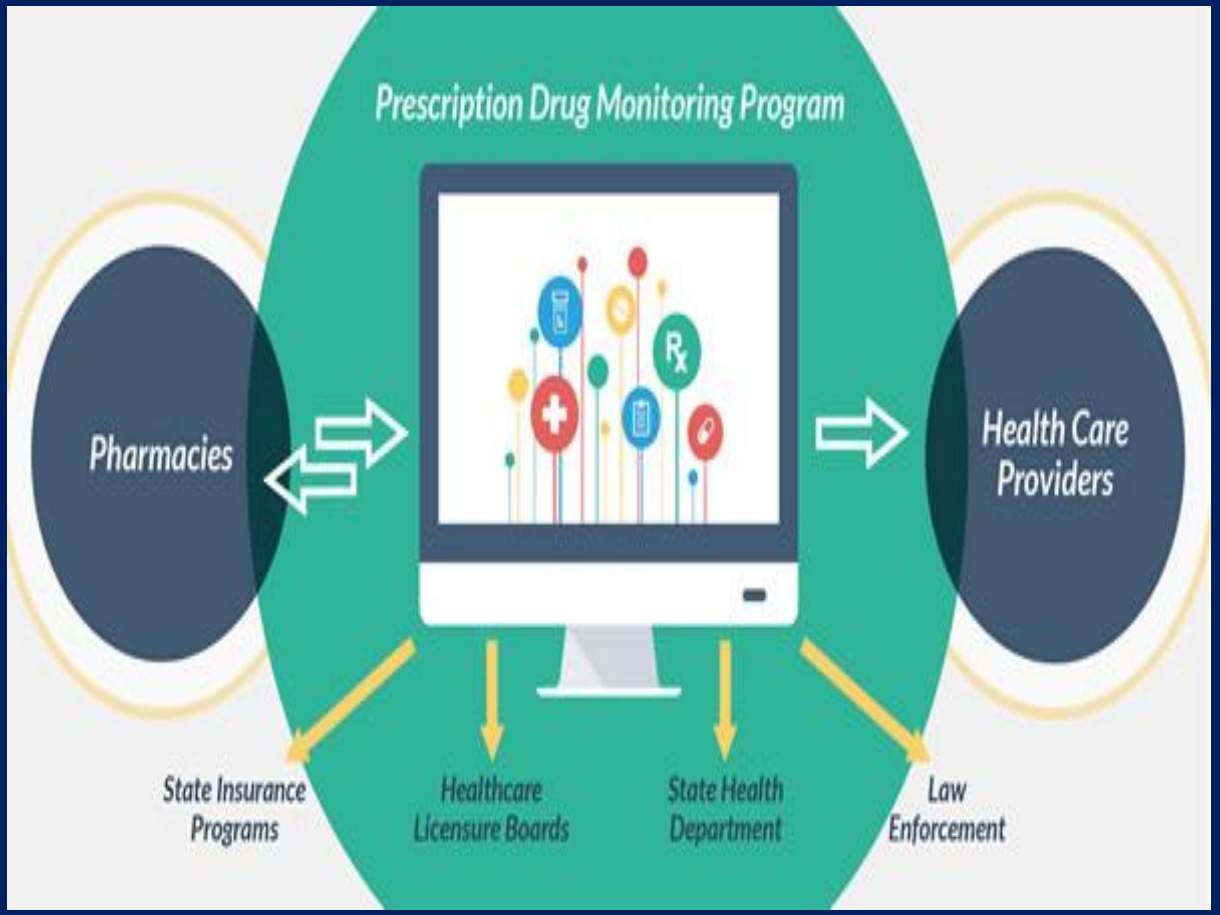
  Intravenous route, 0.2-0.5 mg q min1 mg., max 5 mg total.

epocrates, athenahealth service (2019)

State Legislation

- Bill 274 **Prohibits more than 7-day supply of opioids within a 7 day period for an acute condition**
- Bill 270 Must have a bona fide prescriber-patient relationship to prescribe (delayed implementation)
- Bill 47 Requires methadone clinics & physician offices that dispense buprenorphine on premises report to MAPS

Michigan Automated Prescription System (MAPS)



On your Radar as a Nursing Leader!

Drug Diversion is a Multi-Victim Crime

Employee Risks:

- Health - morbidity and death
- Progression to illicit substances
- Risky behaviors
- Incarceration
- Loss of employment
- Revocation of license

Patient Risks:

- Lack of pain control
- Infection risk
- Care by an impaired employee

Health System Risks:

- Patient harm -- *CDC estimates ~30,000 people exposed to Hep C in last decade by infected hospital workers using narcotics intended for patients.*
- Civil and regulatory liability
- Reputation and brand at risk

*

Implicit & Explicit Bias

- 2 states now requiring for relicensure (MI & CA)
- Discussion is used to improve your own client practice
- Self reflection
- #1 concern in a recent yearly report of ER are racial and ethnic d
- We all have them and need to be aware of them
- Implicit Association Test (IAT)
- If someone has a mental health diagnosis to they receive quality pain care?

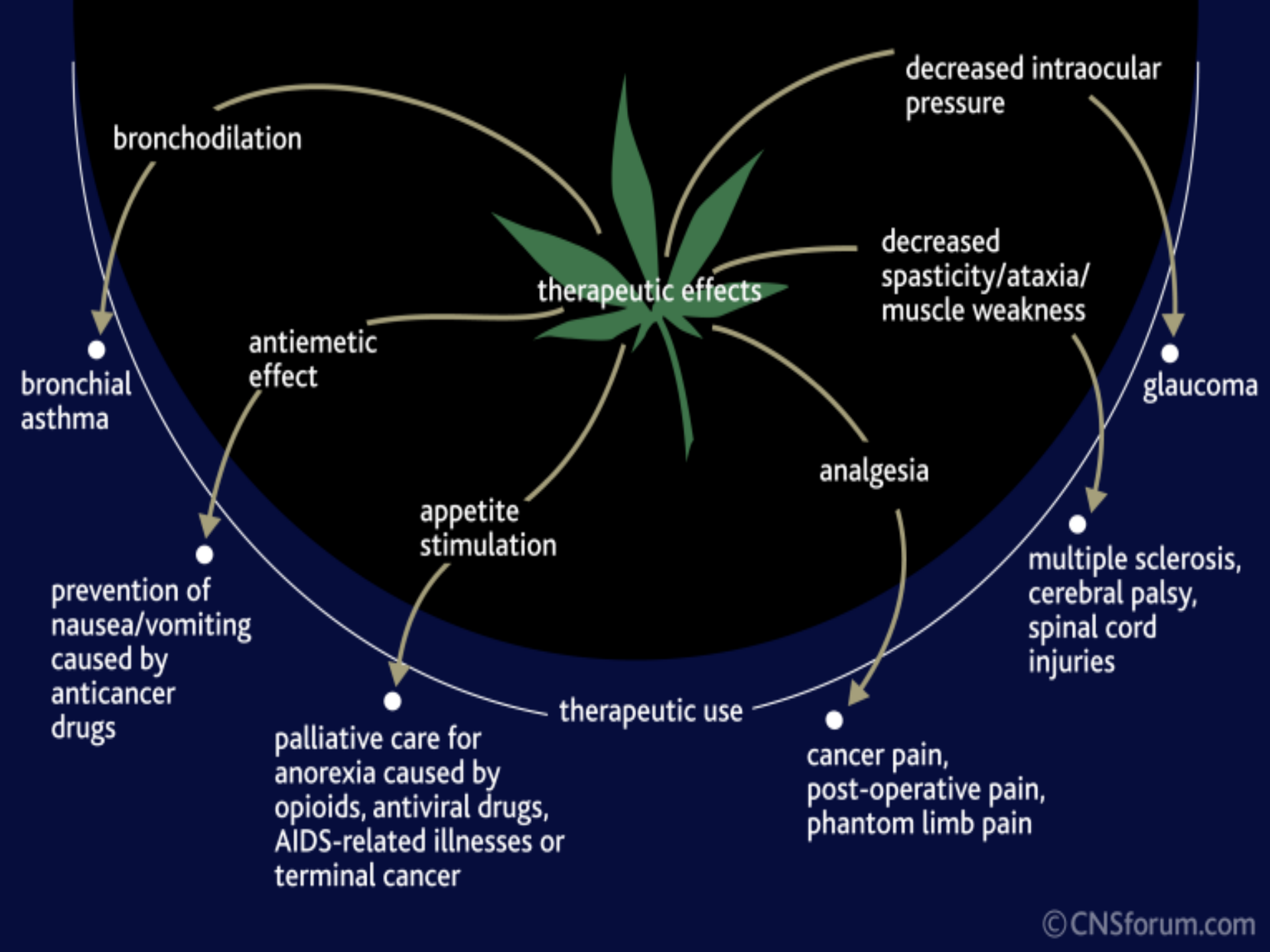
What is implicit bias?

- Attitudes or stereotypes that appear in interpersonal, social situations
- Unconsciously negative held thoughts, which in healthcare professionals, may lead to:
  - inaccurate or compromised clinical decisions
  - an erosion of trust between health professionals and patients due to poor interpersonal interactions and biased behaviors.

Medical and Recreational Marijuana Use

Marijuana in all forms is a DEA, Scheduled C-I drug, is federally illegal and for that reason is always prohibited in the inpatient care setting. This applies even if the patient has a state of Michigan Medical Marijuana card. This includes edibles.

Marijuana in Michigan


bronchodilation
decreased intraocular pressure
therapeutic effects
decreased spasticity/ataxia/ muscle weakness
antiemetic effect
bronchial asthma
glaucoma
analgesia
appetite stimulation
multiple sclerosis, cerebral palsy, spinal cord injuries
prevention of nausea/vomiting caused by anticancer drugs
therapeutic use
palliative care for anorexia caused by opioids, antiviral drugs, AIDS-related illnesses or terminal cancer
cancer pain, post-operative pain, phantom limb pain
©CNSforum.com

Irritable Bowel Syndrome (IBS)
Bristol Stool Form Scale

Stool Form	Appearance	Type
Separate hard lumps, like nuts (hard to pass). Results from slow transit		1
Sausage-shaped but lumpy		2
Like a sausage but with cracks on its surface		3
Like a sausage or snake – smooth and soft		4
Soft lumps with clear cut edges (easy to pass)		5
Fluffy pieces with ragged edges		6
Watery, no solid pieces. Results from very fast transit		7

True constipation

Ideal normal

True diarrhea

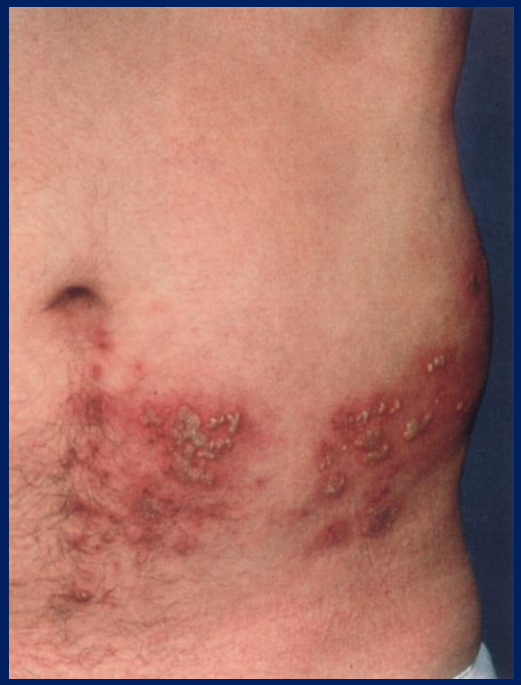
NOVARTIS

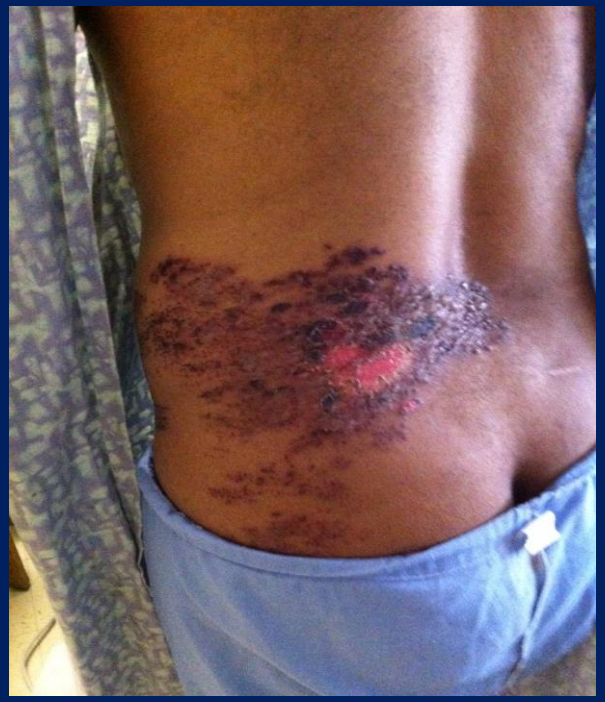
Subcutaneous Methylnaltrexone

New Drug Application filed 5/30/07, approved in 2008

- For treatment of opioid-induced constipation in patients receiving palliative care
- Peripherally acting mu-opioid receptor antagonist
- <u>Without interfering with pain relief</u>
- Single use, pre-filled syringes introduced 2010
- Phase III, oral formulation development for chronic, non-cancer pain patients
- Patents and applications expirations ranging from 2017-2031

Shingrix
50 yo & older: 0.5 ml IM X 1
and second vaccine at month 2-6
for 2 total doses

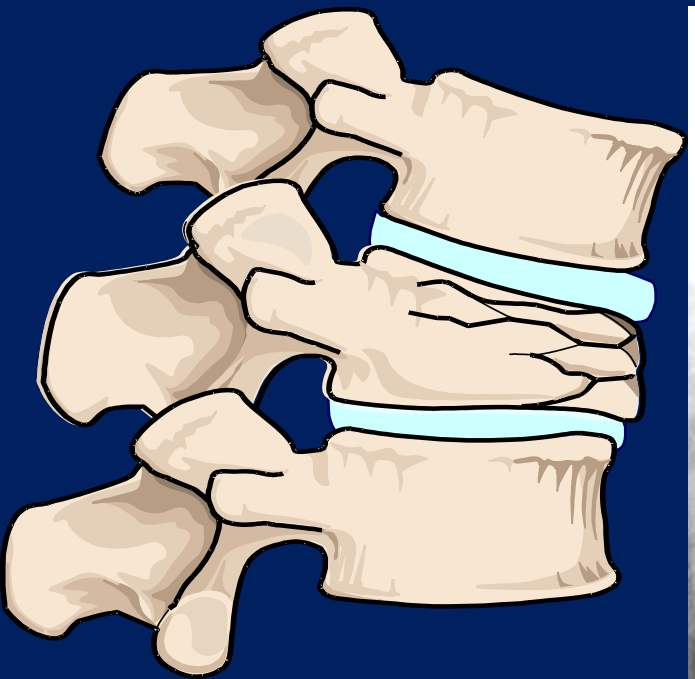


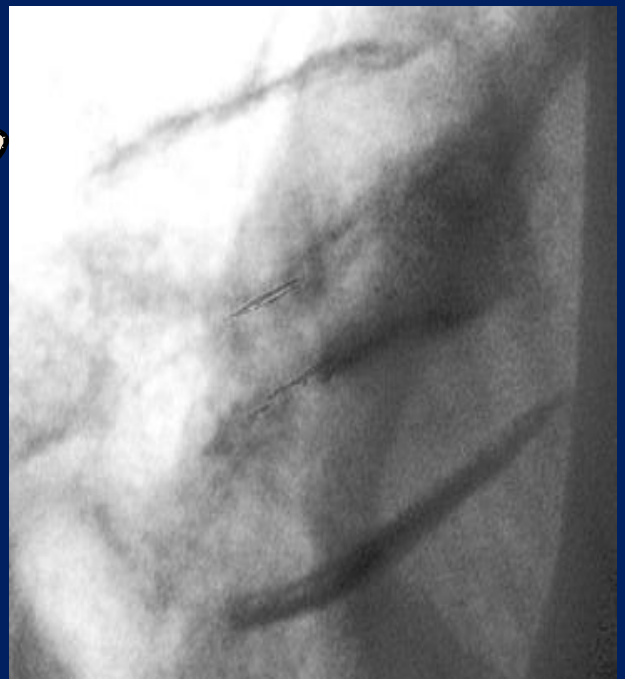


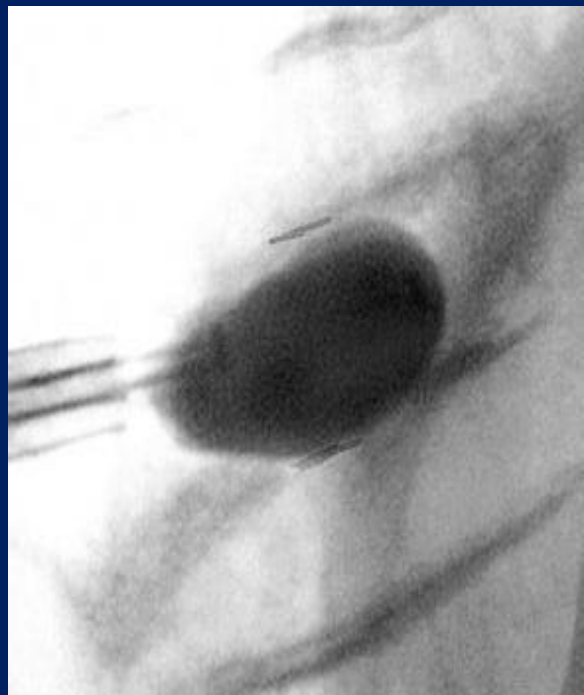
VCFs

Balloon Kyphoplasty Treatment Goals

- Aimed at restoring height and stability in fractured vertebral body
- Treating pain related to vertebral collapse

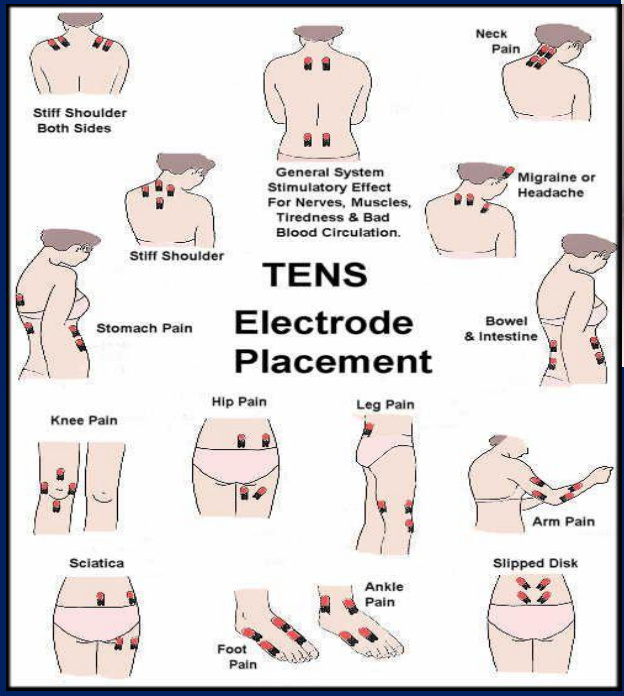


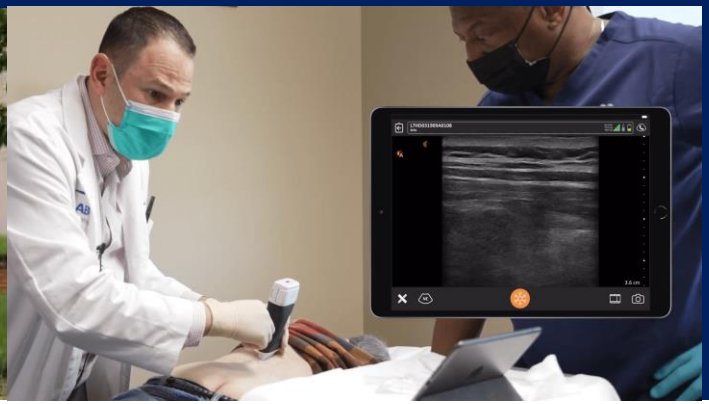




Integrative Therapies

- Ice/Heat
- Massage
- Distraction
- Music Therapy
- Positioning and Splinting
- Pet Therapy
- Hydo Therapy
- Aroma Therapy
- Acupuncture
- Transcutaneous Electrical Nerve Stimulation (TENS)





Ultrasound pain management device makes way for new FDA category

October 4, 2021

Lois Levine

The US Food and Drug Administration created a new category for ZetrOZ's Acoustic Medicine device.

Other Issues for Nursing Leaders

- How we speak and how we act: (Lead by Example)
  - "Non-compliant"
  - "Train Wreck"
  - "*Addict*" versus addictive disease
  - "They did this to themselves", "I am not contributing to their delinquency"

  - Do our faces & body language give our feelings away??
  - Concerns about diversion
  - Failure to recognize pseudo addiction

  - Caring behaviors
    - Use of touch
    - Ability to listen without judgement
    - Establishing a relationship with the patient/client and their families

Caring Behaviors in Pain Management

- **Can empathy be taught?**

- **Establishing a caring relationship in pain management:**

  Opportunity to meet family members
  One of the most vulnerable times
  Desperately seeking help and hope!
  The feeling of being totally alone
  You have the ability to change someone's life EVERYDAY!

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