PAIN MANAGEMENT IN THE OLDER ADULT

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DICLAIMERS:

1. I am not a pain doc.

2. I am only talking about chronic non-cancer pain (CNCP)

3. My pain team is not helpful, either.

4. Don't get excited: I don't have any great secrets.

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Chronic Pain: Definition

- A persistent or recurring pain lasting more than 3 months, or beyond the normal tissue healing period
  - » *Int'l Assn for Study of Pain*
- An unpleasant sensory and emotional experience associated with, or resembling that associated with, actual or potential tissue damage.
  - » *https://www.iasp-pain.org/DeclarationofMontreal*

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A BIT OF PITIFUL HISTORY…

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Opioid Crisis

- Opioid overdoses have tripled since 2000
- US is <5% global population, we consume 80% worlds opioids
- Top prescribers are FM, IM, APPs
- Complex issue but due to:
  - Inappropriate prescribing
    - » Ex: giving 30d supply; leaving hospital with big bottle
  - Lack of knowledge of adv. reactions / dangers
  - Opioid misuse and addiction
  - Using opioids for CNCP

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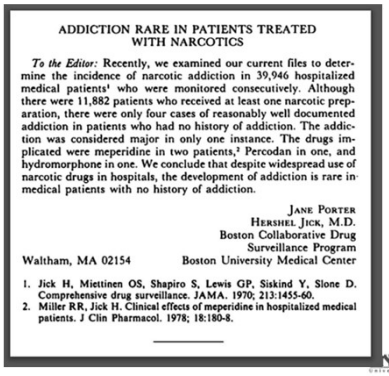
NEJM 1980



ADDICTION RARE IN PATIENTS TREATED WITH NARCOTICS

To the Editor: Recently, we examined our current files to determine the incidence of narcotic addiction in 39,946 hospitalized medical patients[1] who were monitored consecutively. Although there were 11,882 patients who received at least one narcotic preparation, there were only four cases of reasonably well documented addiction in patients who had no history of addiction. The addiction was considered major in only one instance. The drugs implicated were meperidine in two patients,[2] Percodan in one, and hydromorphone in one. We conclude that despite widespread use of narcotic drugs in hospitals, the development of addiction is rare in medical patients with no history of addiction.

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1. Jick H, Miettinen OS, Shapiro S, Lewis GP, Siskind Y, Slone D. Comprehensive drug surveillance. JAMA. 1970; 213:1455-60.
2. Miller RR, Jick H. Clinical effects of meperidine in hospitalized medical patients. J Clin Pharmacol. 1978; 18:180-8.

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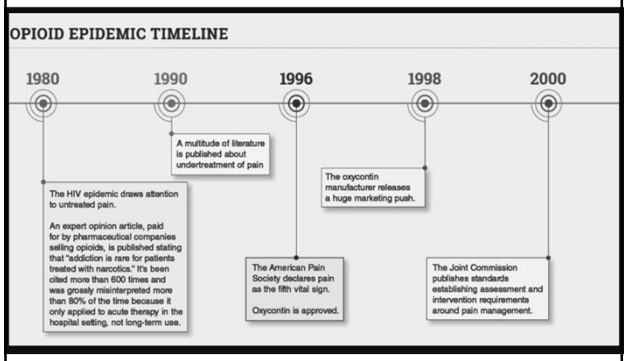

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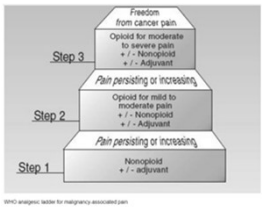
WHO PAIN LADDER

- Published in1986 to educate providers to treat cancer pain
- CDC recommend for noncancer pain in 2016



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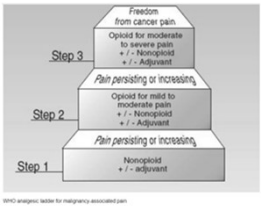
PROBLEMS WITH WHO PAIN LADDER

- Not good for CNCP
- Does not address neuropathic pain
- Little emphasis on:
  - nonpharm measures
  - Interventional
  - complementary
  - multidisc teams



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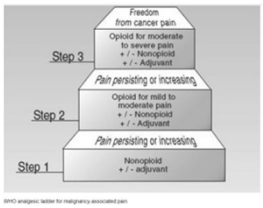
WHO PAIN LADDER; keepers

- Oral meds preferred
  - IM Demerol anyone?
- Around the clock
  - Not PRN



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1990's: American Pain Society

- Concerned that inpatient and cancer pain was poorly managed
- They aggressively pushed the concept of "pain as the 5th vital sign"

American Pain Society

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JCAHO 2001: Pain is the 5th Vital Sign

- "pain relief has been nobody's job"
- "make pain visible"
- "work..to encourage therapeutic opiate use"
- "therapeutic use rarely results in addiction"

The Joint Commission National Quality Approval

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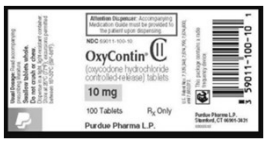
OxyContin® launched in 1996



- Sales force doubled
- Offices given starter coupons
- Swag included fishing hats and plushies
- 1997: 670,000 Rxs
- 2002: 6.2 million

Kelvey, The Smithsonian, 2018

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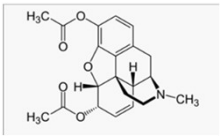
NO Oxy??

- 4-6% of people who misuse opioids switch to heroin
  - Cheaper
  - Easier to get
- 80% of heroin users started with Rx opioids



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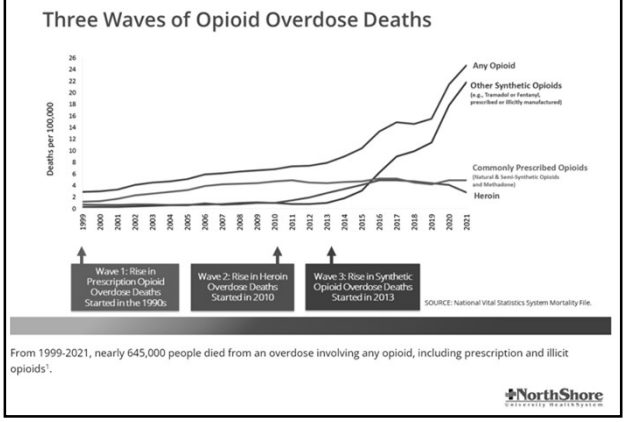

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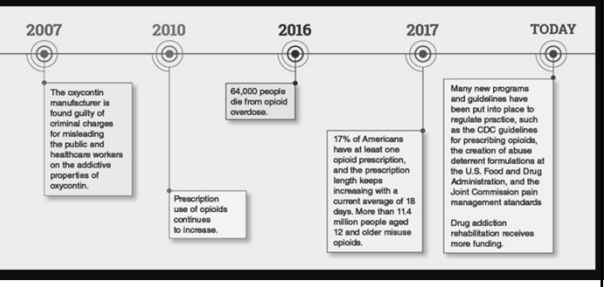

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JCAHO 2001:
~~Pain is the 5th Vital Sign~~

- The standard was removed in 2009!

Source:
The Joint Commission's Pain Standards: Origins and Evolution, 2017

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NEJM 1980

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2. Miller RR, Jick H. Clinical effects of meperidine in hospitalized medical patients. J Clin Pharmacol. 1978; 18:384-8.

- "For reasons of public health, readers should be aware that this letter has been 'heavily and uncritically cited' as evidence that addiction is rare with opioid therapy."
- NEJM 2017

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2019

Too many lawsuits!

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In Guilty Plea, OxyContin Maker to Pay $600 Million

Share full article

From left, Howard R. Udell, the top lawyer for Purdue Pharma; Dr. Paul D. Goldenheim, the company's former medical director; and Michael Friedman, Purdue's president.
Photographs by Don Petersen for The New York Times

New York Time May 10, 2007

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What we know NOW about opioids:

- They definitely help with acute pain
- Only modest improvement in CNCP in pain and function
- Adverse Reactions
  - Neurotoxicity
  - Tolerance
  - Physical and psychological dependence
  - Unintentional overdoses with EtOH, benzo's etc.
  - Constipation

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Case Study:

- Pearl is an 82 yr old retired RN who has long hx of chr. pain from botched plastic surgery on her legs
- Also has low back and neck pain
- Has been alternating hydrocodone and tramadol for years

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Nice assessment in Up To Date…

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Your History: Make a Smart Phrase?
(Thanks UpToDate)

Pain history
OLDCARTS
▪ **O**nset ("When did your pain start?")
▪ **L**ocation ("Where does it hurt?")
▪ **D**uration ("How long does your pain last?")
▪ **C**haracter ("How does your pain feel?", ie, aching, burning, shooting, tingling)
▪ **A**lleviating/**A**ggravating ("What makes your pain better/worse?") and **A**ttribution ("What do you think is the cause?")
▪ **R**adiation ("Does this pain spread anywhere else?")
▪ **T**emporal pattern ("Does your pain vary over the course of a day?")
▪ **S**ymptoms associated ("How does your pain impact your physical function, your mood, your sleep?")

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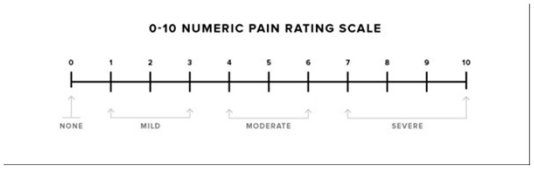
"It's always a 10"



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Wong-Baker FACES® Pain Rating Scale

This tool was originally created with children for children to help them communicate about their pain. Now the scale is used around the world with people ages 3 and older, facilitating communication and improving assessment so pain management can be addressed.

WongBakerfaces.org

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Better: PEG Scale

Pain severity and impact	
Pain intensity, pain interference with enjoyment of life and general function (PEG)	
▪ What number (0 to 10) best describes your pain on average in the past week?	_____
▪ What number (0 to 10) best describes how, in the past week, pain has interfered with your enjoyment of life?	_____
▪ What number (0 to 10) best describes how, in the past week, pain has interfered with your general function?	_____

- https://www.painscale.com/

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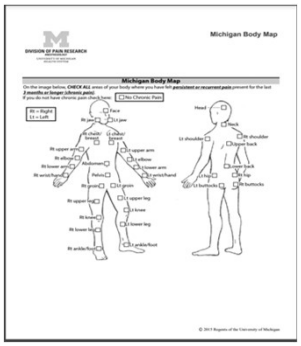
Better: Pain Map



- There are many online to choose from
- Completed by patient

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Three Types of Pain:

- NOCICEPTIVE; tissue injury
  - Postop, arthritis, DJD
- NEUROPATHIC: nerve injury
  - Post herpetic and other neuropathies, trigeminal neuralgia, carpal tunnel
- CENTRAL: no apparent injury
  - Fibromyalgia, CRPS

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Education

- Reducing normal fears (eg, "there must be something wrong," and "hurt means harm") is an important first step toward reactivation and participation in effective techniques for pain self-management. Patients who understand their own chronic disease conditions are more likely to be effective agents in their own treatment outcom

UTD

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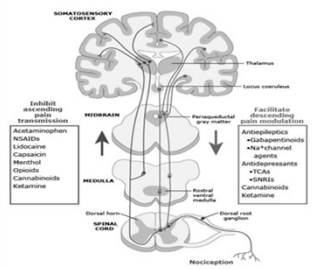
Pain pathways[1-3]



NSAIDs: nonsteroidal antiinflammatory drugs; TCAs: tricyclic antidepressants; SNRIs: serotonin-norepinephrine reuptake inhibitors.

References:
1. Martyn J, Mao J, Bittner EA. Opioid Tolerance in Critical Illness. N Engl J Med 2019; 380:365.
2. Chen L, Michalsen A. Management of chronic pain using complementary and integrative medicine. BMJ 2017; 357:j1284.
3. Al-Hasani R, Bruchas MR. Molecular mechanisms of opioid receptor-dependent signaling and behavior. Anesthesiology 2011; 115:1363.

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Set patient expectations

- Patients with chronic pain require ongoing evaluation, education, and reassurance, as well as help in setting reasonable expectations for response.
- Current chronic pain treatments often result in improvement but not elimination of pain (**30 percent reduction on average** is typical)
- However, even a 30 percent pain reduction can be meaningful in improving quality of life and function, particularly when achieved by incorporating motivational interviewing and pain neuroscience education
- Empathic and affirmative clinician-patient communications have been demonstrated to improve pain treatment outcomes
  - » UTD

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Nonpharmacologic multimodal analgesia

- Cognitive behavioral: identify distressing negative cognitions and beliefs; increasing psychological flexibility, mindfulness-based stress reduction, relaxation training, biofeedback
- Physical: activity coaching, graded exercise (land and aquatic) with physical training, class, trainer, and/or solo; TENS use while physically active
- Spiritual: identify and seek meaningfulness and purpose of life
- Education (patient and family): improve health literacy, motivate patients to initiate and sustain efforts that increase function, mood, sleep, and quality of life.

TENS: transcutaneous electrical nerve stimulation.

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Pharmacologic treatment based on type of pain[1,2]

Type of pain	First-line therapy	Considerations for opioid use
Nociceptive	NSAIDs	When other treatment options are inadequate, for pain severe enough to require potentially daily, round-the-clock, long-term treatment. Limit dose and duration whenever possible. Encourage as-needed use linked to meeting specific activity goals.
Neuropathic	Antidepressants (TCAs or SNRIs) or Antiseizure medications	
Central sensitization	Antidepressants (TCAs or SNRIs) or Antiseizure medications	Avoid whenever other multidisciplinary treatment options have not been systematically, sufficiently, and consistently trialed. Opioids often worsen central sensitization treatment outcomes.

NSAIDS: nonsteroidal antiinflammatory drugs; TCAs: tricyclic antidepressant; SNRIs: serotonin-norepinephrine reuptake inhibitors.

References:
1. Pain Management Best Practices Inter-Agency Task Force Report: Updates, Gaps, Inconsistencies, and Recommendations. U.S. Department of Health and Human Services. Available at: https://www.hhs.gov/sites/default/files/pmtf-final-report-2019-05-23.pdf (August 4, 2022).
2. Health Care Guideline: Pain: Assessment, Non-Opioid Treatment Approaches and Opioid Management Care for Adults. Institute for Clinical Systems Improvement. Available at: https://www.icsi.org/wp-content/uploads/2019/10/Pain-Interactive-7th-V2-EE-8.17.pdf (Accessed on April 28, 2020).

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Pain terms and definitions[1]

- **Allodynia:** Pain due to a stimulus that does not normally provoke pain.
- **Hyperalgesia:** Increased pain from a stimulus that normally provokes pain.
- **Central sensitization:** Increased responsiveness of nociceptive neurons in the central nervous system to their normal or subthreshold afferent input.
- **Nociceptive pain:** Pain that arises from actual or threatened damage to non-neural tissue and is due to the activation of nociceptors.
- **Neuropathic pain:** Pain caused by a lesion or disease of the somatosensory nervous system.
- **Nociplastic pain:** Pain that arises from altered nociception despite no clear evidence of actual or threatened tissue damage causing the activation of peripheral nociceptors or evidence for disease or lesion of the somatosensory system causing the pain.

Reference:
1. IASP Terminology. International Association for the Study of Pain. Available at: http://www.iasp-pain.org/Education/Content.aspx?ItemNumber=1698 (Accessed on December 1, 2010).

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Both peripheral and central sensitization may play a role, though most attention has focused on changes in the spinal cord and brain in sustaining many chronic pain conditions including neuropathic pain, fibromyalgia, persistent postoperative pain, and rheumatologic conditions including osteoarthritis [2-6]. Sensitization plays a prominent role in "nociplastic pain," which is defined as pain that arises from altered nociception despite no clear evidence of actual or threatened tissue damage causing the activation of peripheral nociceptors or evidence for disease or lesion of the somatosensory system causing the pain.

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Recommended drug classes for treatment of neuropathic pain

Drug	Effective dose	Comments
First-line therapy		
Antiseizure medications		• Can cause dizziness and sedation; minimize with slow titration • Use lower doses for older patients • Avoid concomitant use with opioids; can cause respiratory depression
Gabapentin	• IR: 300 to 1200 mg orally three times daily • ER: 600 to 1800 mg orally twice daily	• Initiate treatment at a low dose (typically 300 mg orally at night), increasing gradually until pain relief or limiting side effects occur
Pregabalin	• 150 to 300 mg orally twice daily	• Initiate treatment at low dose (typically 150 mg orally at night)
Antidepressants		
Serotonin-noradrenaline reuptake inhibitors		
Duloxetine	• IR: 60 to 120 mg orally once daily	
Venlafaxine	• ER:75 to 225 mg orally once daily	
Tricyclic antidepressants (TCAs)		• Initiate treatment at low dose, increase slowly at weekly intervals • May take 6 to 8 weeks, including 2 weeks at highest tolerated dose, for adequate trial
Nortriptyline	• 25 to 75 mg orally once daily	• Preferred among TCAs due to less sedation and fewer anticholinergic effects
Amitriptyline	• 25 to 125 mg orally once daily	• Most sedating TCA
Second-line therapy		
Capsaicin 8% patch	• 1 to 4 patches to painful area for 30 to 60 minutes every three months	• For peripheral pain • Long term safety not established
Lidocaine patch	• 1 to 3 patches to painful area for ≤12 hours in a 24 hour period, patch-free period of ≥12 hours	• For peripheral pain
Tramadol	• IR: 100 to 200 mg orally three times daily • ER: 100 to 200 mg orally twice daily	
Third-line therapy		
Botulinum toxin A	• 50 to 200 units subcutaneously to painful area every 3 months	• Specialist use, for peripheral pain
Strong opioids	• Individual titration	• Not routinely used for chronic pain • Use only at lowest effective dose, after risk assessment, and with ongoing assessment of risks and benefits • Use in combination with nonpharmacologic and nonopioid pharmacologic therapy

IR: immediate release; ER: extended release.

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ACP American College of Physicians Leading Internal Medicine, Improving Lives

CLINICAL GUIDELINE

Nonpharmacologic and Pharmacologic Management of Acute Pain From Non–Low Back, Musculoskeletal Injuries in Adults: A Clinical Guideline From the American College of Physicians and American Academy of Family Physicians

Amir Qaseem, MD, PhD, MHA; Robert M. McLean, MD; David O'Gurek, MD; Pelin Batur, MD; Kenneth Lin, MD; and Devan L. Kansagara, MD, MCR; for the Clinical Guidelines Committee of the American College of Physicians and the Commission on Health of the Public and Science of the American Academy of Family Physicians*

Aug 2020

2020 American College of Physicianshttps://doi.org/10.7326/M19-3602op

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ACP/AAFP

- Topcal NSAIDs with/without menthol
- Oral Nsaids with/without acet
- Acupressure/TENS
- Avoid opioids, incl tramadol

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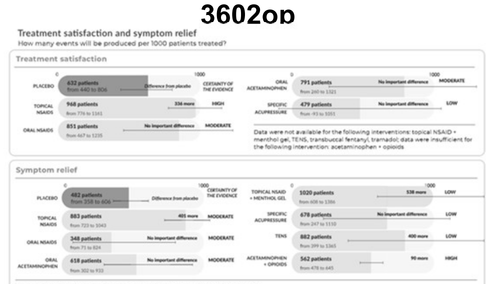
2020 American College of Physicianshttps://doi.org/10.7326/M19-3602op



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Tramadol (tramadon't)

- Tramadol is a mixed mechanism opioid with a weak affinity for the mu opioid receptor and also serotonin and norepinephrine reuptake inhibition. Like other opioids, it may be used as second-line agent for patients with fibromyalgia who have not responded to initial therapy with other agents. Efficacy of tramadol for other types of chronic pain, including neuropathic pain, is unclear

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Acetaminophen

- Not that effective
- May be placebo for some..
- Limit 3000 mg daily

Limit 2000 mg daily in frail or thin elders

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Benzodiazepines

- Just no.

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Gabapentanoids

- Gabapenitn
  - "the duct tape of neurology"
  - Not scheduled in US but IS in the UK
  - Present in 90% of fatal overdoses
- Pregabalin
  - Is schedule V

44

Cannabis

- Such a mess
- Don't use if psychiatric issues
- Don't use if history of abuse

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Carisoprodol (Soma®)

This drug should no longer be used for any indication, due to lack of proven efficacy, high rates of physical dependence, and risk of agitation and delirium tremens when abruptly withdrawn.

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Muscle Relaxants Don't Relax

- Pain relief and relief of spasm without spasticity may be related to CNS effects, including sedation, rather than analgesic effects. When true muscular spasticity is present, anti-spasticity drugs, such as baclofen or tizanidine, may alleviate the pain from persistent tonic muscular contractions.
- Utd

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Managing Pain in CKD: Watch dosages in these

- Tramadol
- Duloxetine
- Morphine
  - Esp in end-of-life care (drips)
  - Consider hydromorphone (Dilaudid®)

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Buprenorphine

- previously used for opoid use disorder (OUD)
  - Prescribers had to have special training (the X waiver)
  - That has been discontinued sicne Jan 2023
- Avaoilable in transdermal patch or a buccal film
- Ass'd with less physical dependence and risk for OD

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https://www.fiercehealthcare.com/

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Buprenorphine

- The recommendation lacks clarity in terms of formulation, dosing, and frequency of dosing, along with an unclear target population.
- For example, should clinicians apply this recommendation to patients who are opioid naive, opioid experienced and tolerant, or both?

51

Any Rx for an opiod must be accompanied by an Rx for a laxative

- Rule #1:
- Colace is WIMPY
- Always use senna routinely(not PRN)
- Miralax regularly

52

Naloxone (Narcan)

- Make sure your patients have this
- Also assisted living, etc

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Prescription Monitoring: Just Do It!

- There is a box to check to see all the states
- Pelican Rapids back when….

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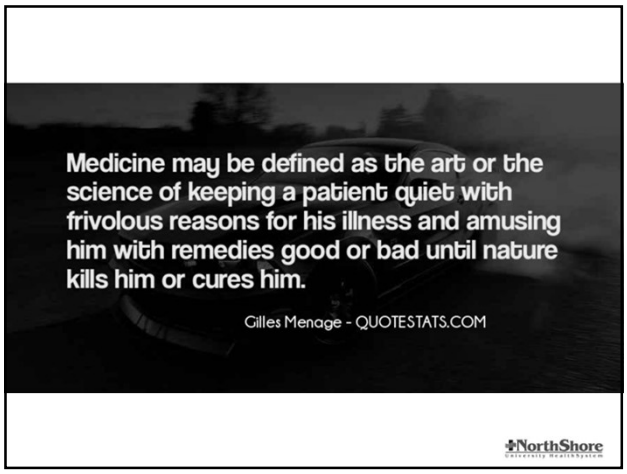
Medicine may be defined as the art or the science of keeping a patient quiet with frivolous reasons for his illness and amusing him with remedies good or bad until nature kills him or cures him.
Gilles Menage - QUOTESTATS.COM
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