Evidence-Based Pain Medicine for Primary Care Physicians

Ezekiel Fink, MD

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Houston Methodist Hospital, The Center for Headache, Spine and Pain Management
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Educational Objectives

By completing this educational activity, the participant should be better able to:

1. Implement best practices, alternative treatment options, and multi-modal approaches to pain management including physical therapy, psychotherapy, and other treatments.
2. Utilize safe and effective pain management related to the prescription of opioids and other controlled substances.
3. Discuss the standards of care pain treatment, identification of drug-seeking behavior in patients, effectively communicate with patients regarding the prescription of an opioid or other controlled substances.
4. Appropriately prescribe and monitor controlled substances.

Speaker Disclosure

Dr. Fink disclosed that he has no financial relationships with any ineligible organizations or commercial interests.

Ezekiel Fink, MD

Dr. Ezekiel Fink is triple board certified in **neurology, pain medicine, and brain injury medicine**.

After completing his neurology residency as a Chief Resident at Albert Einstein, he did two separate **pain fellowships** at Harvard's **Massachusetts General Hospital**.

After completing training, he joined the staff of the **Department of Neurology at UCLA** in 2007. He continues his professorship track with UCLA.

In 2014, Dr. Fink joined the **Methodist Hospital** System in Houston Texas where he is **Medical Director of Pain** for the 7-hospital system and outpatient clinics.

He is widely published in the field of pain management and spends a substantial amount of time on **policy work** including extensive expert review/ educational work with the California Medical Board and Department of Justice.

Dr. Fink collaborates and partners extensively with clinical and public health entities including the Center for Disease Control (CDC), the Federation of State Medical Boards (FSMB), the National Safety Council (NSC) on issues regarding the opioid epidemic and proper opioid prescribing.

DISCLOSURE: Dr. Fink invented and is Chief Medical Officer of OcciGuide, a device that helps with the administration of occipital nerve blocks.

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The Prescriber's Approach to Pain Management

Ezekiel Fink, MD
Houston Methodist, Medical Director of Pain Management
Chief Medical Officer, Cedar Health Research
Chief Medical Officer, OcciGuide
Board Certified in Neurology, Pain Management, and Brain Injury Medicine

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OBJECTIVES

- Overview of pain
- Discuss the scope of the opioid epidemic
- Discuss pain and effective ways to treat it
- The inherited patient
- Discuss tapering strategies
- When to refer
- Case studies

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Pain – Complex and Universal

International Association for the Study of Pain (IASP) definition: "an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage" was recently revised and now includes https://www.iasp-pain.org/PublicationsNews/NewsDetail.aspx?ItemNumber=1645#2

- Pain is always a personal experience that is influenced to varying degrees by biological, psychological, and social factors.
- Through their life experiences, individuals learn the concept of pain.
- A person's report of an experience as pain should be respected.
- Although pain usually serves an adaptive role, it may have adverse effects on function and social and psychological well-being.
- Verbal description is only one of several behaviors to express pain; inability to communicate does not negate the possibility that a human or a nonhuman animal experiences pain.

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Acute Pain (IASP)

- Acute pain is awareness of noxious signaling from recently damaged tissue.

Chronic Pain (IASP)

- When persisting longer than 3 months, such pain is classified as chronic.

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Chronic Pain Facts:

- Prevalence of chronic pain ranges from 11% to 40%
  - Over 100 million Americans
- 27% of African Americans and 28% of Hispanics over the age of 50 reported having severe pain most of the time vs 17 % of non-Hispanic whites.
- Chronic pain, one of the most common reasons adults seek medical care in both acute (ER) and primary care settings and is linked to:
  - Restrictions in mobility and daily activities
  - Dependence on opioids
  - Anxiety and depression
  - Poor perceived health or reduced quality of life

Source: https://journalofethics.ama-assn.org/article/pain-and-ethnicity/2013-05

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Physicians and patients differ on goals (Hainry et al, 2017)

Goals of Pain Management:

Patients
- 48% of patients ranked reducing pain intensity as their top priority
- 22% ranked finding a diagnosis as most important.

Physicians
- Improving function is most important (41%)
- Reducing medication side effects -26%.

The greatest difference between patient and physician rankings was for reducing pain intensity.

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Despite substantial gaps in perception of effective pain management between clinician and patient, adequate treatment of pain requires:

- Access to a treating clinician
- Ability of patient to communicate pain complaint and be heard
- Appropriate diagnostic work-up
- Follow-up appointments for tailoring care

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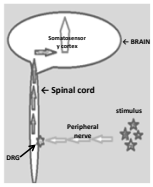
Extremely Abridged Explanation of Physiology of Acute Pain

Pain sensation begins in the peripheral nervous system.
- A stimulus from the environment triggers a nerve impulse, which carries the pain signal

The pain signal is then transmitted to the central nervous system
- Enters the spinal cord through the dorsal root ganglion (DRG)
- Travels up the spinal cord
- Is Processed/interpreted in the somatosensory cerebral cortex (brain).



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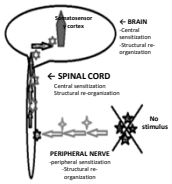
Extremely Abridged Explanation of Physiology of Chronic Pain

No stimulus required

Multiple mechanisms promote or facilitate persistent/chronic pain
- **Peripheral sensitization**
- **Central sensitization**

Areas of brain potentially affected:
- Ventrolateral thalamus
- Secondary somatosensory cortex
- Dorsal posterior insula
- Anterior cingulate cortex



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Pain is a Symptom

- While the physiology of pain can be mapped in the nervous system, assessing the personal experience of pain in a clinical setting is challenging
- Pain has a substantial subjective component:
  - Relies upon verbal reporting or physical expression (e.g., facial grimacing)
  - Challenge in assessment:
    - Subjective scales
    - No objective testing
- Pain is a symptom and the underlying cause if often multifactorial or unclear
- The result -> **communication and perception dictate care**

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

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THE U.S. OPIOID CRISIS:

- In 2014, there was a record 18,893 deaths related to opioid overdose, including both medications and heroin
- In 2012, health care providers wrote 259 million prescriptions for opioid pain relievers
- Prescription opioid sales in the U.S. have increased by **300%** since 1999
- Almost 2 million Americans, age 12 or older, either abused or were dependent on opioid pain relievers in 2013

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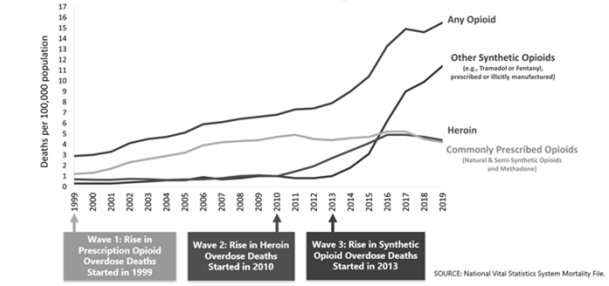

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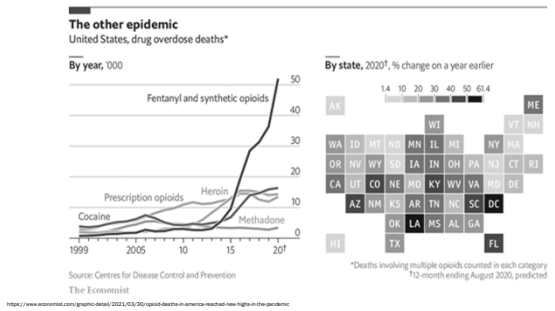
The Impact of COVID-19



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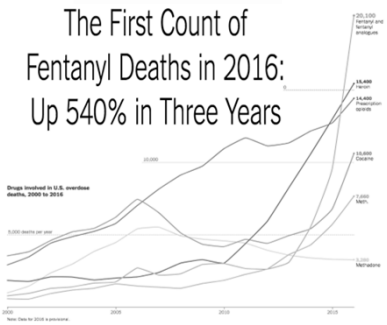

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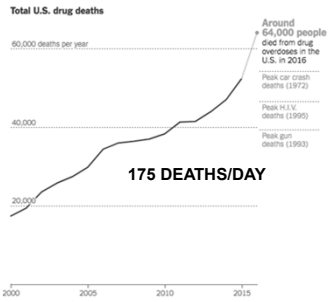

DYING AT RECORDS RATES > CARS, GUNS, AND FALLING

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HOW DID WE GET HERE?

- Pre-90's
  - Pain as a symptom underappreciated.
  - Opioids not widely used or marketed
- In the 90's
  - Flawed research which underappreciated risks of opioids
  - In parallel, pharma companies marketed the benefits for pain relief
  - The field of pain management entered its infancy
- 2001 – Joint Commission/Pain as 5th Vital Sign

Pain was being identified and opioids appeared to be a relatively safe treatment option

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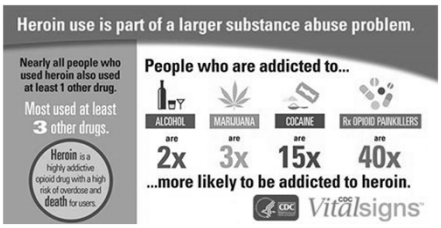

Source: https://www.cdc.gov/drugoverdose/opioids/heroin.html

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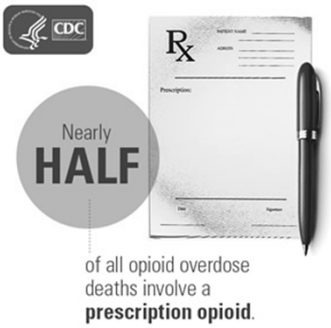

Source: https://www.cdc.gov/drugoverdose/opioids/prescribed.html

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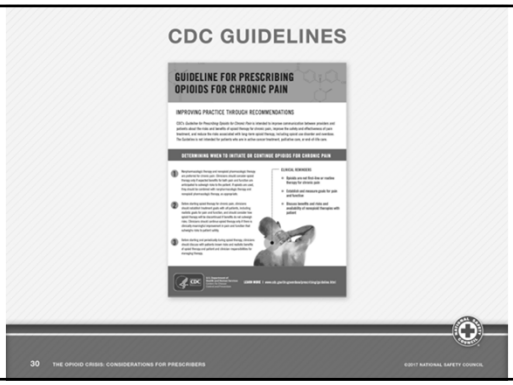

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Organization of Recommendations

The 12 recommendations are grouped into three conceptual areas:

1. Determining when to **initiate** or **continue** opioids for chronic pain
2. Opioid **selection**, dosage, duration, follow-up, and discontinuation
3. **Assessing risk** and addressing harms of opioid use

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DETERMINE WHEN TO INITIATE OR CONTINUE OPIOIDS FOR CHRONIC PAIN

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Recommendation #1

- ***Nonpharmacologic* therapy and *nonopioid pharmacologic* therapy are preferred for chronic pain.**
  - Effective nonpharmacologic therapies: exercise, cognitive behavioral therapy (CBT), interventional procedures
- **Clinicians should consider opioid therapy only if expected <u>benefits</u> for both pain and function are anticipated to <u>outweigh risks</u> to the patient.**
- **If opioids are used, they should be <u>combined</u> with nonpharmacologic therapy and nonopioid pharmacologic therapy, as appropriate.**

(Recommendation category A: Evidence type: 3)

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Recommendation #2

- **TREATMENT GOALS:** Establish before starting
  - INITIAL:
    - Pain
    - FUNCTION!!!
  - ONGOING:
    - Meaningful improvement in pain and function that outweigh RISKS

(Recommendation category A: Evidence type: 4)

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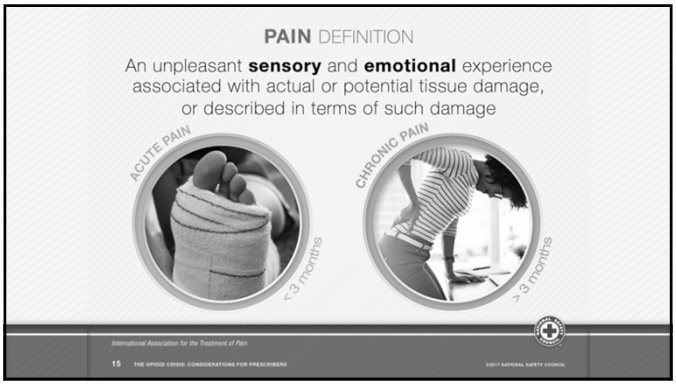

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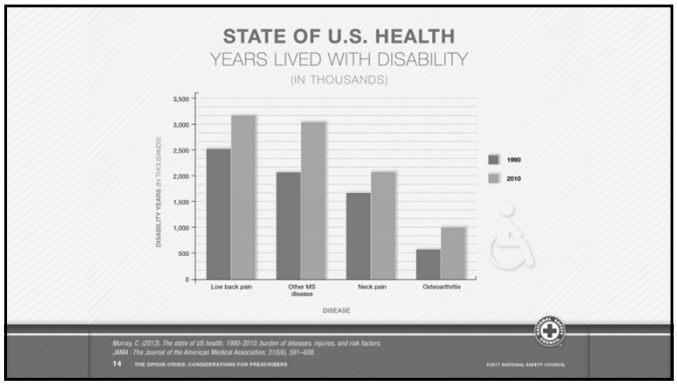

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Recommendation #3

- **Before starting and periodically during opioid therapy discuss with patients known risks and benefits**

(Recommendation category A: Evidence type: 3)

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OPIOID SELECTION, DOSAGE, DURATION, FOLLOW-UP, AND DISCONTINUATION

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Recommendation #4

- **When starting opioid therapy for chronic pain, clinicians should prescribe immediate-release opioids instead of extended-release/long-acting (ER/LA) opioids.**

(Recommendation category A: Evidence type: 4)

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Recommendation #5

- When opioids are started, clinicians should prescribe the lowest effective dosage.

CUT-OFFS:

- ***≥50 morphine*** **milligram equivalents (MME)/day**
- **≥90 MME/day**

(Recommendation category A: Evidence type: 3)

"Start Low/Go Slow"

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Recommendation #6

- Long-term opioid use often begins with treatment of acute pain.
- 3 days or less will often be sufficient; more than 7 days will rarely be needed.

(Recommendation category A: Evidence type: 4)

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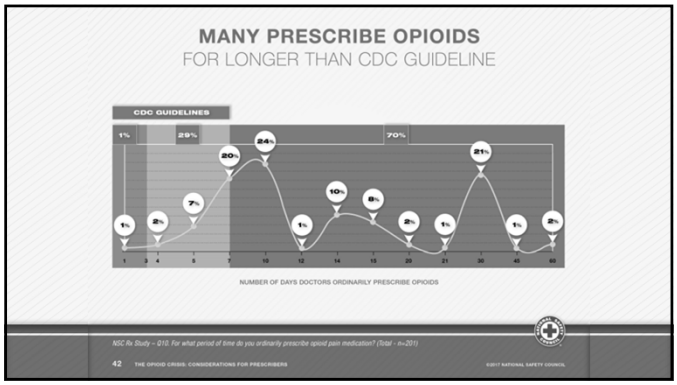

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Recommendation #7

- Clinicians should evaluate benefits and harms with patients within *1 to 4 weeks*:
- Clinicians should evaluate benefits and harms of continued therapy with patients every *3 months* or more frequently.
- If benefits do not outweigh harms of continued opioid therapy, clinicians should optimize other therapies and work with patients to taper opioids to lower dosages or to taper and discontinue opioids. A.k.a. - The Power of "No".

(Recommendation category A: Evidence type: 4)

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ASSESSING RISK AND ADDRESSING HARMS OF OPIOID USE

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Recommendation #8

- Before starting and periodically during continuation of opioid therapy, clinicians should evaluate risk factors for opioid-related harms.
- Clinicians should incorporate into the management plan strategies to mitigate risk
- Naloxone

(Recommendation category A: Evidence type: 4)

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INCREASED RISK OF OPIOID RELATED HARMS

- **Apnea**
- **Pregnancy**
- **Renal or hepatic insufficiency, aged ≥65 years.**
- **Ensure treatment for depression is optimized.**

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Source: https://www.cdc.gov/drugoverdose/opioids/prescribed.html

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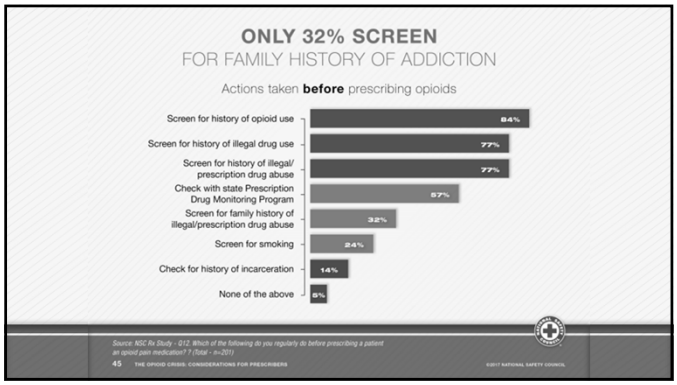

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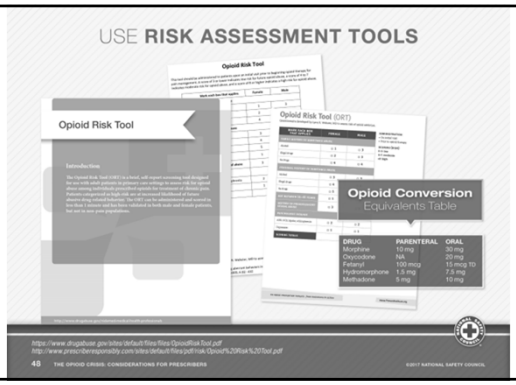

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NALOXONE CO-PRESCRIBING

- Blocks/reverses affects of opioids
- Few contraindications/side effects
- Physician's can provide a prescription for naloxone for patient at risk for overdose
- CDC Guidelines for providing naloxone: "SOB 50"
  - history of overdose
  - history of substance use disorder
  - higher opioid dosages (≥50 MME/day)
  - concurrent benzodiazepine use, are present

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Recommendation #9

- **PDMP:**
  - Clinicians should review PDMP data when starting opioid therapy for chronic pain
  - Clinicians should review periodically during opioid therapy for chronic pain
    - Ranging from every prescription to every 3 months.
- **States that have mandatory PMP regulations:**
  - New York
  - Tennessee
  - Kentucky

(Recommendation category A: Evidence type: 4)

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If prescriptions from multiple sources, high dosages, or dangerous combinations

- **Do not dismiss patients from care—use the opportunity to provide potentially lifesaving information and interventions.**

What does the Texas Medical Board Say?

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Recommendation #10

- **Urine drug testing (UDT):**
  - before starting opioid therapy
  - At least annually
- **My Tip:** Familiarize yourself with the metabolites of various controlled substances

(Recommendation category B: Evidence type: 4)

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Recommendation #11

- **Clinicians should avoid prescribing opioid pain medication and benzodiazepines (e.g., lorazepam, alprazolam, diazepam…etc.) concurrently whenever possible.**

(Recommendation category A: Evidence type: 3)

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Recommendation #12

- **Clinicians should offer or arrange evidence-based treatment (usually medication-assisted treatment with buprenorphine or methadone in combination with behavioral therapies) for patients with opioid use disorder.**

(Recommendation category A: Evidence type: 2)

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SUBSTANCE USE DISORDER

- **The *Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition (DSM-5) no longer uses the terms substance abuse and substance dependence,**
- **Substance use disorders occur when the recurrent use of alcohol and/or drugs:**
  - Causes clinically and functionally significant impairment, such as health problems, disability, and failure to meet major responsibilities at work, school, or home.
  - According to the DSM-5, a diagnosis of substance use disorder is based on evidence of impaired control, social impairment, risky use, and pharmacological criteria.

What does your gut tell you?

Source: https://www.samhsa.gov/disorders/substance-use

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MEDICATION ASSISTED TREATMENT (MAT)

- 4 treatment options for substance use disorder
  - Detox + abstinence
  - Detox + monthly shot of naltrexone
  - **MAT with buprenorphine**
  - **MAT with Methadone**
- **People with MAT have best outcomes based on the literature at this point**

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2016 OPIOID USE DISORDER TREATMENT STUDY

TREATMENT	OUTCOME
MAT	**BEST OUTCOMES**
COUNSELING WITHOUT MAT	**2X** MORTALITY RATE
LEFT RESIDENTIAL TREATMENT	**4-FOLD** MORTALITY INCREASE
LEFT MAT	**2X** MORTALITY RATE

Pierce, M., Bird, S. M., Hickman, M., Marsden, J., Dunn, G., Jones, A., & Millar, T. (2016). Impact of Treatment for Opioid Dependence on Fatal Drug-Related Poisoning: A National Cohort Study in England. Addiction, 111(2), 298–308. http://doi.org/10.1111/add.13193

59 THE OPIOID CRISIS: CONSIDERATIONS FOR PRESCRIBERS ©2017 NATIONAL SAFETY COUNCIL

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THE NEW OPIOID GUIDE APP IS AN EASILY ACCESSIBLE TOOL TO HELP PRESCRIBERS **PUT CDC'S GUIDELINE INTO PRACTICE.**

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CDC **Clinical Decision** Software (CDS) Program

In Response to the Opioid Epidemic:

- **CDC** released guidelines for prescribing opioids for chronic pain in early 2016
- HMH has partnered with the CDC to develop an efficient and cost-effective technology-driven strategy to combat the opioid epidemic.
  - Secured two grants from the CDC to develop CDS and metrics
- Houston Methodist worked collaboratively with Epic, Yale and other healthcare institutions to develop tools within Epic

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OPIOIDS

- Poppy plant derivate
  - Mu receptor
- Different formulations
  - Natural
  - Semi-synthetic
  - Synthetic
- Analgesia
  - How does it compare to other treatments?
- START LOW/GO SLOW

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OPIOID SIDE EFFECTS

- Addiction, abuse, and overdose
- Tolerance – meaning you might need to take more of the medication for the same pain relief
- Physical dependence – meaning you have symptoms of withdrawal when the medication is stopped
- Opioid Induced Hyperalgesia – Increased sensitivity to pain
- GI – Constipation, nausea, vomiting, and dry mouth
- Sleepiness and dizziness
- SEDATION vs. RESPIRATORY RATE
- Confusion/cognitive side effects
- Depression
- Endocrine – Lower sex drive, energy, and strength
- Itching and sweating

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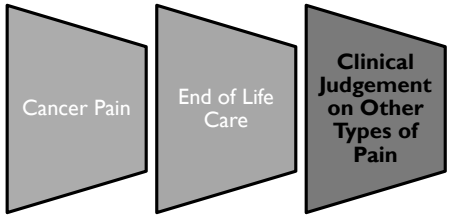
When Opioids are **Indicated**



Many factors to consider but generally, management of acute or chronic moderate to severe pain when alternative treatments are inadequate.

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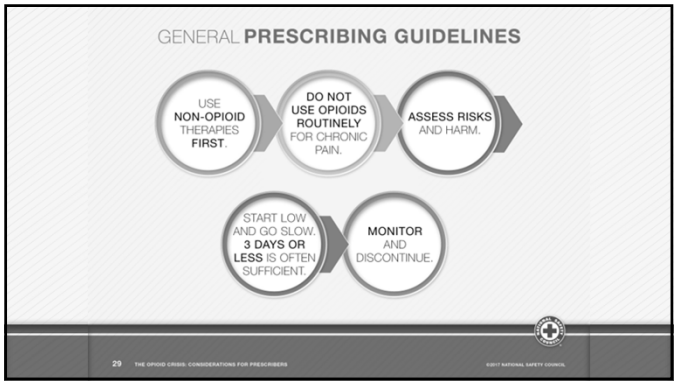

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MEDICATION ALTERNATIVES:

- NSAIDs
- Acetaminophen
- Anticonvulsants
  - Gabapentin, Pregabalin
- Tricyclics
  - Amitriptyline, nortriptyline…etc.
- Other Antidepressants
  - SNRI – Duloxetine, Milnacipran, Venlafaxine
- Other Muscle Relaxants
  - Cyclobenzaprine, Metaxalone, Tizanidine…etc.
  - NOT Carisoprodol (Soma)!!!!
- Topicals

"KEEP OPIOID NAÏVE PATIENTS OPIOID NAÏVE"

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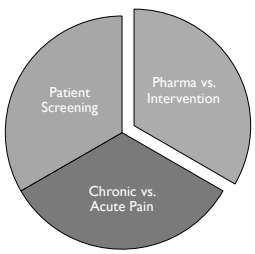
Treatment **Considerations**



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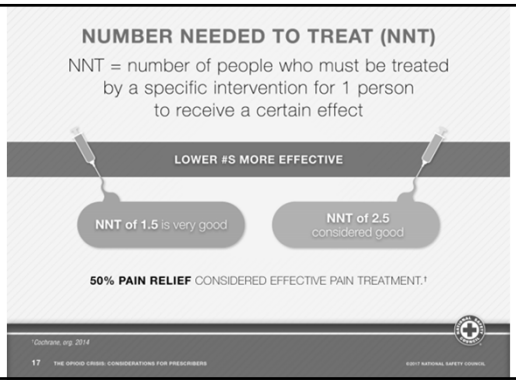

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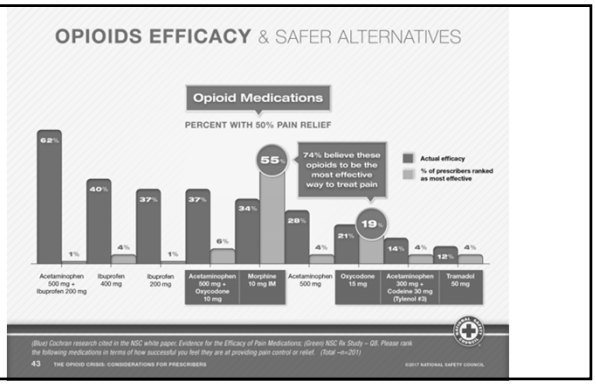

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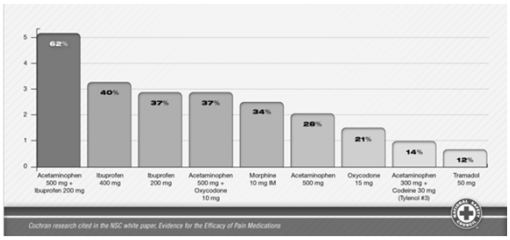
EFFICACY OF PAIN MEDICATIONS FOR ACUTE PAIN



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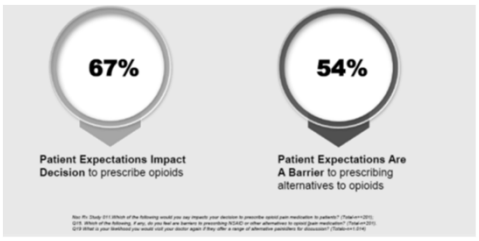

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TRICYCLIC ANTIDEPRESSANTS (TCA):

- NNT 3+
- Can be used daily to treat/prevent pain
- **Imipramine** and **nortriptyline** have less anticholinergic action and less side effects.
- **Amitriptyline** has more anticholinergic activity and more side effects. May be more efficacious.
- Once a day dosing. Need to be titrated. Start low. Start at night and can help the patient sleep.
- Side effects: dry mouth, constipation, sweating, dizziness, blurred vision, drowsiness, cardiovascular (arrhythmia, palpitations, hypotension), sedation and urinary retention. Cognitive/confusion, gait disturbance/falls.

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SEROTONIN-NOREPINEPHRINE REUPTAKE INHIBITORS (SNRI):

- Duloxetine, venlafaxine, milnacipran
- NNT 3+
- Once to twice a day dosing
- Can be used daily to treat/prevent pain
- Side effects: nausea, somnolence, dry mouth, constipation, reduced appetite, diarrhea, hyperhidrosis, and dizziness.
- Rare elevations of plasma glucose, hepatic enzymes, or blood pressure have been reported with duloxetine. It is contraindicated in severe hepatic dysfunction and in unstable arterial hypertension.
- Venlafaxine extended-release may be better tolerated than immediate-release, the main side effects being gastrointestinal disturbances. However, increased blood pressure and clinically significant ECG changes reported in 5% of patients at high dosages in some studies.

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GABAPENTIN/PREGABALIN:

- NNT 3+
- Can be used daily to treat/prevent pain
- Both drugs need to be titrated
- Twice to three times per day dosing
- The most common side effects include dizziness and somnolence, peripheral edema, weight gain, asthenia, headache, and dry mouth

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TOPICALS

Topical lidocaine:

- NNT 4+
- Can be used daily to treat/prevent pain
- Generally safe with low absorption
- Once a day – 12 hours
- Local adverse reactions (skin irritation)

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Multimodal Analgesia

"Combination of non-opioids, opioids, and non-pharmacologic interventions allowing for optimal analgesia with the lowest incidence of side effects with the potential for more rapid recovery and step down of pain regimens"

- 2012 ASA Guidelines
- 2016 APS Guidelines
- 2016 CDC Guidelines
- 2018 PADIS Guidelines
- ERAS Guidelines (multiple, based on surgery type)

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Multimodal Analgesia

Simultaneous administration of two or more analgesics

Synergistic effect

Minimize opioid utilization

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INTERVENTIONAL THERAPIES FOR PAIN

- Injection Types
  - Diagnostic, prognostic, therapeutic
- For many procedures high quality evidence is limited
- Clinical guidelines have been developed
- Evidence based medicine is supportive of the use of these procedures
- Injections vs chronic use of opioids?

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INTERVENTIONAL TECHNIQUES

- Muscular(TPI)/musculoskeletal(shoulder, knee, bursa…etc.)
- Nerve blocks
  - Occipital nerve block for headache
  - Stellate ganglion block for complex regional pain syndrome
- Spine
  - Epidural steroid injection
  - Sacroiliac Joint procedures (injection, radiofrequency)
  - Facet procedures (injection, radiofrequency)
- Neuromodulation
  - Spinal cord stimulator/peripheral nerve stimulator
    - New developments
  - Implantable pain pumps
- Botulinum Toxin A
  - Chronic migraine
  - Possible treatment for chronic pain?

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LOCAL GUIDELINES

ALTO PROGRAM PROTOCOLS

HEADACHE/MIGRAINE	Metoclopramide, Ketorolac, IV fluids, Sumatriptan – If <50% relief, then Magnesium, Valproic acid, Dexamethasone – If <50% relief, then Haloperidol – If <50% relief, then Observation with neuro consult
EXTREMITY FRACTURE OR DISLOCATION	Nitrious oxide + intranasal Ketamine – Set up for block Ultrasound-guided regional Anesthesia
MUSCULOSKELETAL PAIN	Ibuprofen + Acetaminophen Lidocaine or Diclofenac patches Cyclobenzaprine or Diazepam Trigger-point or other soft tissue injection
LUMBAR RADICULOPATHY	Ibuprofen + Acetaminophen Cyclobenzaprine or Diazepam Gabapentin Lidocaine patch Ketamine infusion + drip
RENAL COLIC	Ketorolac + Acetaminophen + IVF Cardiac lidocaine – 1.5 mg/kg IV, max 200 mg

LaPietra, Alexis. Cutting Edge Pain Management' ACEPnow, August 2016,15-16.

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THE OPIOID CRISIS: CONSIDERATIONS FOR PRESCRIBERS

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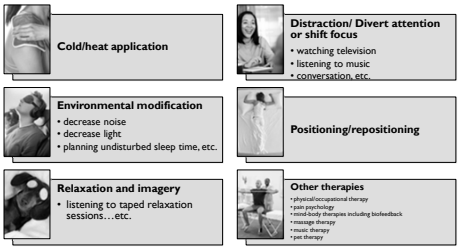
Other Treatment **Alternatives**



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THE INHERITED PATIENT…ON OPIOIDS

- The initial steps:
  - Confirm the medications and doses
  - Direct correspondence with the referring/treating clinician,
  - Checking prescription monitoring database (PMP)
  - Urine toxicology screen

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INHERITED PATIENT: COMMUNICATION IS KEY!!!

- Reassure patient
- Discuss the risks/benefits of opioids
- Ideally taper off
- Lower doses of opioids, lower risks
- Present with other treatment options.

<u>Clear communication is essential!!</u>

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INHERITED PATIENT: COMMON PATIENT CONCERNS

- Wish they could get off the opioids
  - Fear the pain
  - Fear the withdrawal
- Fear judgement by family/friends
- Worry that nobody believes them about pain

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THE TAPER

- The longer the patient has been on opioids, the slower it should be
- Patients taking opioids as needed on a non-daily basis can often have medications discontinued without tapering
- The goal may be to get the patient to safer doses, not a discontinuation
- Tailor the taper to the patient
  - If the patient anxious
  - Duration of therapy
  - Comorbidities
- Risk of withdrawal

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DIFFERENT TYPES OF TAPERS

- No consensus on one method
- A decrease by 10% of the original dose per week is usually well tolerated with minimal physiological adverse effects
  - Long-acting vs. Short-acting
- Other patients can tolerate a more rapid taper – can safely decrease by 20-50% per week
- Literature suggests that a taper of <20% dose reduction per week will minimize withdrawal symptoms
- Once the lowest possible dose is reached, consider increasing interval of dosing

Its ok to pause and re-start
Its ok to change methodologies

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TAILORED TAPER

- Rapid tapers in some instances (e.g., overdose)
- Consider formal detox program:
  - If rapid taper is necessary,
  - If patient is having difficulty with slow taper,
  - If you or the patient prefer…etc.
- Formal detox options
  - Inpatient
  - Outpatient
- In all cases:
  - Optimize nonopioid pain management
  - Make sure psychosocial support is present

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IDENTIFY AND TREAT SYMPTOMS THAT ARISE DURING TAPER

- Look out for anxiety, depression, and opioid use disorder
- Use other treatments to help with symptoms that arise
  - Withdrawal (e.g., drug craving, anxiety, insomnia, abdominal pain, vomiting, diarrhea, diaphoresis, tremor, tachycardia, or piloerection)
    - Clonidine
  - Sleep impairment
  - Increased pain
- Do not add other controlled substances to the taper
  - Sedative hypnotics
  - Benzodiazepines
  - Carisoprodol (Soma)

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TAPER RESOURCES

Please check these websites for additional information:

- http://www.healthquality.va.gov/guidelines/Pain/cot/OpioidTaperingFactSheet23May2013v1.pdf
- http://paincommunity.org/blog/wp-content/uploads/Safely_Tapering_Opioids.pdf
- http://www.agencymeddirectors.wa.gov/files/opioidgdline.pdf

Other Sources:

- Chou R, Fanciullo GJ, Fine PG, Miaskowski C, Passik SD, Portenoy RK. Opioids for chronic noncancer pain: prediction and identification of aberrant drug-related behaviors: a review of the evidence for an American Pain Society and American Academy of Pain Medicine clinical practice guideline. *J Pain*. 2009;10(2):131.

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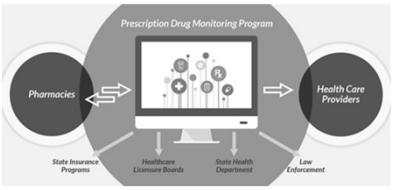
Prescription Drug Monitoring Programs (PDMP)

- State instituted electronic prescription databases
- Access to prescribing and dispensing record of controlled drugs
- Critical step for safe opioid prescribing



Centers for Disease Control.

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PDMP Benefits & Limitations

Benefits	Limitations
• Informs prescribing practice and protects at-risk patients • Identifies the use of multiple prescribers • Identifies concomitant high-risk agents (e.g., benzodiazepines) • Calculate the total amount of opioids prescribed per day (in MME/day)	• May not include prescriptions provided or filled in other states • Methadone received from a medication-assisted treatment facility is not included • Prescriptions received from federal or military facilities may not be included

Centers for Disease Control

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Texas PMP

- Includes data on schedule II, III, IV, and V controlled substances dispensed by a Texas licensed pharmacy or to a Texas resident from a pharmacy located in another state
- Texas licensed pharmacies are required to report controlled dispenses no later than the next business day after fill
- House Bill 2561
  - Requirement to check PMP history upon prescribing and dispensing of opioids, benzodiazepines, barbiturates or carisoprodol. Effective March 1st, 2020
  - Does not apply medications administered *during* an inpatient stay, emergency department or ambulatory surgical center visit

Texas State Board of Pharmacy

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Houston Methodist **Case Studies**

Standardization of Order Sets	CDC Guidelines in the Outpatient Clinics
Ketamine	Emerging Treatment for Acute Pain
Headache & Migraine	Occipital Nerve Blocks with OcciGuide
PDMP Usage	One Click Access
TX HB-2174	Default Setting on Prescribing

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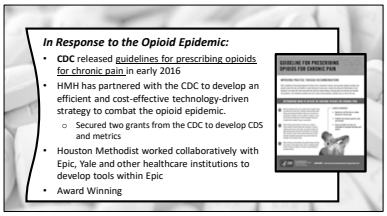
Outpatient Pain Management: CDC **Clinical Decision** Software (CDS) Program



In Response to the Opioid Epidemic:

- **CDC** released guidelines for prescribing opioids for chronic pain in early 2016
- HMH has partnered with the CDC to develop an efficient and cost-effective technology-driven strategy to combat the opioid epidemic.
  - Secured two grants from the CDC to develop CDS and metrics
- Houston Methodist worked collaboratively with Epic, Yale and other healthcare institutions to develop tools within Epic
- Award Winning

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Example of Standardization of Work-Up and Treatment: CDC Recommendation #1#1

- **Pain Management SmartSet**
- **BestPractice Advisory** identifies patients with moderate pain level

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How We're Using Epic

Example of Standardization of Dosing and Registry: CDC Recommendation #4

- **Pain Management SmartSet**
- **Opioid Registry**
  - Lists and stratifies all opioids prescribed in the system

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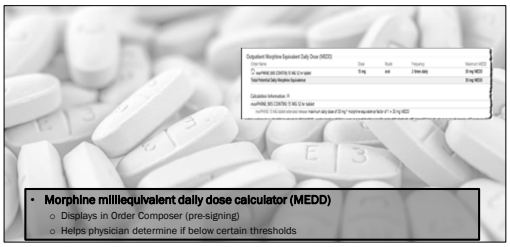
How We're Using Epic

Example of Standardization of Dosing – Pre-Set Values: CDC Recommendation #5



- **Morphine milliequivalent daily dose calculator (MEDD)**
  - Displays in Order Composer (pre-signing)
  - Helps physician determine if below certain thresholds

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Ketamine for Pain Management

Consensus Guidelines on the Use of Intravenous Ketamine Infusions for Acute Pain Management From the American Society of Regional Anesthesia and Pain Medicine, the American Academy of Pain Medicine, and the American Society of Anesthesiologists

Overall, we conclude that subanesthetic ketamine infusions should be considered for patients undergoing painful surgery (grade B recommendation, moderate level of certainty). Ketamine may be considered for opioid-dependent or opioid-tolerant patients undergoing surgery (grade B recommendation, low level of certainty). Because evidence is limited to case reports and series as well as the clinical experience of the committee, ketamine may be considered for opioid-dependent or opioid-tolerant patients with acute or chronic sickle cell pain (grade C recommendation, low level of certainty). For patients with sleep apnea, ketamine may be considered as an adjunct to limit opioids (grade C recommendation, low level of certainty).

Consistent with ACEP Policy statement on Optimizing the Treatment of Acute Pain in the Emergency Department from 2017:

- Administration of sub-dissociative dose ketamine (SDK) may be used either alone or as part of a multimodal approach to pain relief for traumatic and non-traumatic pain. Emergency care providers should disclose to patients that SDK administration may trigger generally minor, transient side effects. Administration of sub-dissociative ketamine should commence under the same procedures and policies as other analgesic agents administered by the nursing staff in the ED setting.

At the Houston Methodist, we are using it for different types of pain with **good success**…

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Occipital Nerve Blocks (ONB)

- Localized procedure targeting the greater and lesser occipital nerves.
- Anesthetic is injected along the path of all 4 occipital nerves.
- Provides rapid onset relief that can last for 2 weeks or more.
- Know quickly if the procedure was effective or if other treatment options should be utilized.

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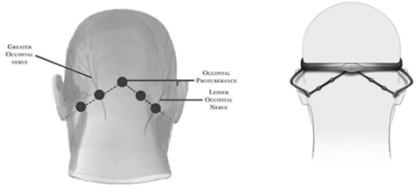
Five randomized controlled trials (RCTs) on the use of ONBs in the management of headaches of different types.

- While the studies had limitations, each demonstrated statistically significant results

Twelve observational studies regarding the use of ONBs also revealed improvement in headaches.

In many of these studies' occipital blocks were utilized after other treatment options had failed. *(Voigt et al 2014)*



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Benefits of ONB in the ED

- Can result in reduced medication intake and reduced opioid utilization.
- Can provide dramatic and immediate pain relief.
- Safe and localized procedure.
- Effective treatment for headache in the Emergency and Primary Care setting.

*Crystal L. Voigt, FNP-BC and MD ABEM, FACEP Maurice O. Murphy. "Occipital Nerve Blocks in the Treatment of Headache: Safety & Efficacy." *The Journal of Emergency Medicine* (2015).

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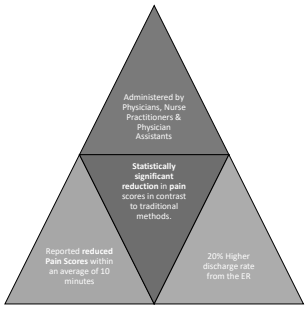
HMH Trial **Results**:



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House Bill 2561 – Texas State Board of Pharmacy Sunset Bill

- Beginning on March 1, 2020, prescribers must check the Texas Prescription Monitoring Program (PMP) before issuing any prescription for four drug classes:
  - Opioids
  - Benzodiazepines
  - Barbiturates
  - Carisoprodol

(https://www.texmed.org/deadlines/details/?did=50200)

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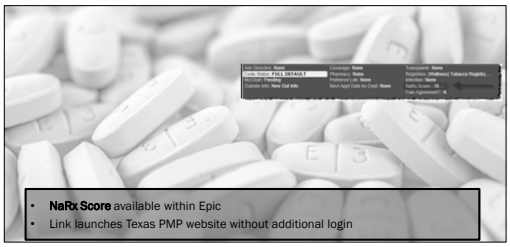
CDC **Recommendation** #9



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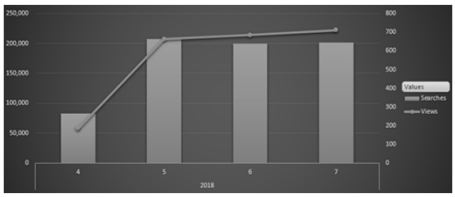
PDMP USAGE AT METHODIST WITH **ONE CLICK** ACCESS



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TX HB-2174

Dear Colleagues,

As a reminder, beginning **Sept. 1, 2019**, the following regulations go into place when treating acute (not chronic) pain, practitioners:

- **May not** issue a prescription for an opioid in an amount that exceeds a **10-day supply**.
- **May not** provide a refill of an opioid for acute pain.
- Exceptions are provided for:
  - Cancer care
  - Hospice or other end-of-life care
  - Palliative care

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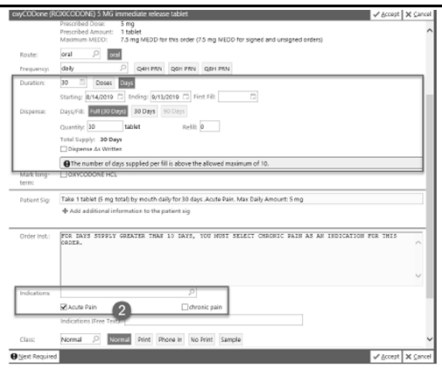

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Now, Everyone's Favorite – More Legal Stuff!

ALL physicians are required to electronically prescribe controlled substances Jan. 1, 2021

Standalone E-Prescribing

PHYSICIANS DO NOT need to have an electronic health record system to prescribe electronically. A number of standalone e-prescribing systems exist. Physicians can search e-prescribing software on the Surescripts website, available at tma.tips/surescripts, and focus their search to "Standalone eRx." If you have questions about seeking a standalone e-prescribing system, contact TMA's Health Information Technology department at (800) 880-5720 or HIT@texmed.org.

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CHALLENGES

- The next crisis is here – pain patients not getting care
- CDC Guidelines becoming a legal standard
  - **<u>It was never intended to be</u>**
  - **<u>Updated version coming soon!!</u>**
- Doctors are scared
  - Regulation + punitive climate= opt out
  - Incentivize!!
- Providing timely access to care
  - Insurance must approve access to other treatment
- Coordinating efforts
  - Universal standards
- Changing public perception
  - Sustained educational campaign

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Notes