Treating Chronic Pain in the Opioid Epidemic: An Integrated Primary Care Model

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Disclosures

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Objectives

1. Discuss the theory links of physical and mental pain in the chronic pain cycle and the lack of current continuity of pain management interventions
2. Describe how to comprehensively assess and screen for pain and substance use in primary care
3. Outline a CDC-based integrated pain management plan including holistic alternatives to opioids for pain management

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US Opioid Problem

- ~2 million Americans with opioid use disorder (OUD)
- >12 million misusing opioids
- ↑ Opioid prescribing rates for chronic/acute pain management through 2014
- Prescription opioids → Heroin (2014-18); → Fentanyl since 2016
- < 80% w/OUD use rehab modalities (more likely to use primary care)
- 2018: prescription opioid OD rates ↓, other opioids ↑

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US Opioid Overdose Statistics

- Prescription opioid OD deaths ↑ to ~19K in 2014, > 3x the number in 2001, total Opioid deaths ~48K
- Providers wrote 259 million prescriptions for painkillers in 2012, enough for every American adult to have more than one bottle (CDC, 2013)
- In 2017, >17% of Americans had at least one opioid prescription filled (CDC, 2018)
- Majority of heroin users report that 1st opioid of misuse was a prescription opioid, not heroin
- Opioid OD cost US taxpayers >$2 billion in 2017 alone
- Opioid-related lawsuits are starting; amounts have been small

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Challenges Associated With Pain Management in Primary Care

- Treating what we can't always see
- Difficulty with insurance issues to get full workup often needed
- Federal regulation and liability, especially now with state licensure and DEA oversight
- Unfamiliarity with all of the pain management options open
- Issues of dependence, tolerance, and the potential for substance use disorder

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Challenges of Untreated Pain

- Optimal care requires adequate pain management, but we must consider the risk of prescription opioid abuse
- Access, stigma, discrimination, lack of comprehensive care affects outcomes
- Prevalence of under-treatment (↑ ER visits and pseudo-addiction behaviors)

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Differentiating Between Pain Types

Acute Pain	Chronic Pain
• Cause known, relatively brief in duration, protective function • Resolution as healing takes place • Often accompanied by observable/objective signs of pain (e.g., ↑ pulse rate/BP and non-verbal indicators such as facial expressions) • Results from disease, inflammation, or injury to tissues, • Emotional response- anxiety or restlessness	• Unknown cause, > 3 months duration, Persistent and recurrent • Outcome is pain control not resolution • May not be visible in exam/testing • Serves no useful purpose (e.g., alert to exigent problem) and may dramatically ↓ function and quality of life • Follows characteristic/non-characteristic pattern, based on origin • Examples are neuralgias, complex regional pain syndrome, hyperesthesias, phantom limb pain • Rarely has observable or behavioral signs, but sufferers may appear anxious, flat, or depressed

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Table 1. Chronic Pain Disorders

Neuropathic Pain	Mixed Pain	Nociceptive Pain
• Peripheral neuropathies (diabetes, HIV)	• Migraine and chronic daily headache	• Mechanical low back pain
• Postherpetic neuralgia	• Fibromyalgia	• Rheumatoid arthritis
• Trigeminal neuralgia	• Phantom limb pain	• Osteoarthritis
• Central post-stroke pain	• Complex regional pain syndrome	• Chronic inflammatory conditions
• Spinal cord injury	• Multiple sclerosis	• Somatoform pain disorder
• Neuropathic low back pain	• Low back pain	• Postoperative pain
	• Myofascial pain syndrome	• Sickle cell crisis
	• Skeletal muscle pain	• Sports/exercise injury

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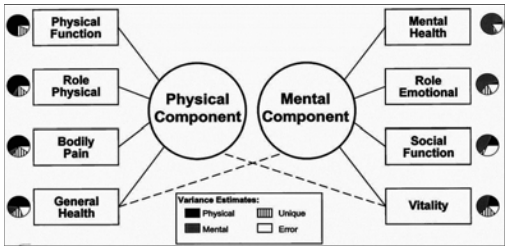
What is Pain?



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Case Study

JM, 50-year-old Black male from urban area, presented to an integrative care Federally Qualified Health Center (FQHC). His chief complaint was hypertension and medication continuance.

- **Vitals**: T98, P64, R12, BP130/70, Wt265, Ht5'10", BMI 28.5, PulOx 95%
- **Labs**: GFR 54, BUN 9, Creatinine 1.49, Cholesterol 201, Triglycerides 108, LDL 129, HgA1C 6.6
- **Meds**: Metoprolol tartrate 50 mg two tabs q12 hours for HTN, Lisinopril 10mg AM for HTN; **MS Contin 60 PO bid for pain; Morphine sulfate 20mg q4 hours PRN for pain; Gabapentin 600mg tid for neuropathic pain**
- **Hx**: uncontrolled HTN, LE PAD
- Admits taking opiates from friends at times d/t excess pain and "running out early."
- UDS + for morphine and cannabis.

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Assessment Concerns

1. Medical health issues
2. Substance use disorder symptoms (increased intake)
3. Mood risk
4. Residual untreated pain
5. Any others?

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Table. DSM-5 Diagnostic Criteria for Opioid Use Disorder[a]

1. Opioids are taken in larger amounts or duration than intended
2. Persistent desire/unsuccessful efforts to cut down or control opioid use
3. A great deal of time is spent obtaining, using, or recovering from the effects of opioids
4. Craving
5. Recurrent use of opioid results in failure to fulfill major role obligations at work, school, or home
6. Continued use despite social/interpersonal substance-related problems
7. Important social, occupational, or recreational activities are given up or reduced because of substance use
8. Recurrent use in hazardous situations
9. Continued use despite knowledge of having a persistent or recurrent opioid-related physical or psychological problem that is likely caused or exacerbated by opioid use
10. Tolerance[b]
11. Withdrawal[b]

Severity: Mild: 2-3 symptoms, Moderate: 4-5 symptoms, Severe: ≥ 6 symptoms

[a] The information above is only an overview of the criteria used. Consult the DSM-5 before making a diagnosis.
[b] Note: This criterion is not considered to be met for patients taking opioids solely under appropriate medical supervision
Source: American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*, 5th ed. Washington, DC: American Psychiatric Association; 2013:541.

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OUD Risk in Chronic Pain

Role of Genetics
- Pharmacodynamics/pharmacokinetics

Risk Factors
- #1—family hx
- Childhood/other trauma (ACES)
- Co-occurring disorders
- TBI
- Early/childhood use

Access
- Prescribing patterns
- Favored rural, white, chronic pain use
- Un-/under-treated MH

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Integrated Pain Management is Effective Management

- Improved patient outcomes
- Improved function and rehabilitation
- Focusing on attainable goals, not being "pain-free"
- Reduced suffering
- Reduced public burden of disability

All of the factors above make timely, effective management a central component in primary care

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Assessment, Step 1

*Recognize gender, cultural, and social disparities in chronic pain assessment

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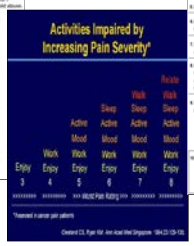
Assessment, Step 1,
Cont'd



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CDC Guidelines

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ALTOs - Alternatives to Opioids

(CHA, 2019)

Goal: To use non-opioid approaches as first-line therapy and educate our patients about the following:

1. Alternatives to opioids as a first-line treatment for pain
2. Non-pharmacologic treatments
3. Realistic pain management goals
4. Potential for addiction and side effects associated with opioids
5. Availability of opioids as rescue medication, if needed

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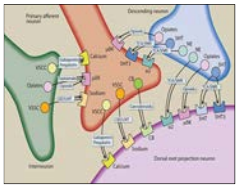
ALTOs and the CERTA Approach

(CHA, 2019)

Channels/Enzymes/Receptors Targeted Analgesia (CERTA)

- Shift from symptom-based to mechanistic approach
- Targeted, patient-focused analgesic approach using combinations of non-opioid analgesics, resulting in the following:
  - Greater analgesia
  - ↓ doses, side effects, and length of stay



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ALTO Pathways - CERTA Meds

(CHA, 2019)

Channels
- Sodium (Lidocaine) | Renal colic pain pathway
- Calcium (Gabapentin) | Extremity and musculoskeletal pain pathways

Enzymes
- COX 1,2,3 (NSAIDS) | All pain pathways

Receptors
- MOP/DOP/KOP (Opioids)
- NMDA (Ketamine) | Musculoskeletal pain pathway
- GABA (Gabapentin) | Extremity and musculoskeletal pain pathway
- 5HT1-4 (Haloperidol/Ondansetron/Metoclopramide) | Abdominal pain pathway
- D1-2 (Haloperidol/Prochlorperazine) | Abdominal pain pathway

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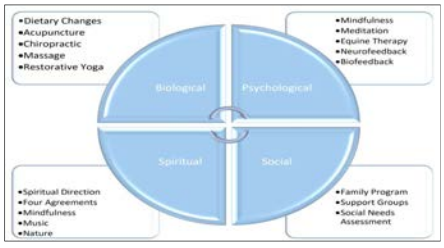
Building on the CDC Guidelines

- Using an integrated pain management approach



https://drstevegrinstead.com/pain-article-archive

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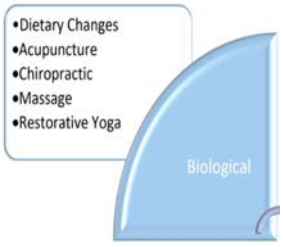
Breaking Down Integrated Pain Management



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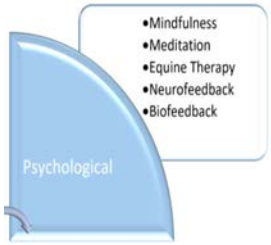
Breaking Down Integrated Pain Management, Cont'd



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Breaking Down Integrated Pain Management, Cont'd

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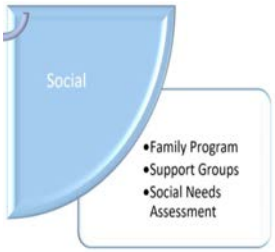
Breaking Down Integrated Pain Management, Cont'd



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Assessment, Step 2-3

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Assessment, Step 4

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Integrated Primary Care Pain Education

Nursing Role in Education

- Learn about new, multi-modal, opioid-sparing ALTO pathways and non-pharmacological approaches
- Work to limit the use of opioids
- Be proactive with patient and family concerns
  - Begin conversations regarding best pain management practices
  - Manage pain expectations
  - Provide educational resources
  - Talk about realistic pain goals
  - Scripting regarding "control" v. "relief" of pain
  - Promote "increasing comfort"
  - Engage patients in developing unique pain plans, which may include both acute and chronic pain management

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Integrated Primary Care Pain Education

Nursing Role in Education

- Partner with the patient and family
  - Educate on pain assessment
  - Educate on functional goals in treatment
- Alternatives to opioids (ALTOs)
  - Educate on multi-modal pain management methods
  - Educate on dangers of opioids and need for integrated care
- Non-medication therapies
  - R-I-C-E or heat
  - Physical therapy
  - Exercise therapy
  - Behavioral health/therapy
  - Acupuncture and somatic therapies
  - Peer support

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Findings by Nursing for the ALTOs Pilot Study Approach (CHA, 2019)

Survey of nurses participating in the ED ALTOs pilot indicated that the top 3 challenges were as follows:

1. Patients do not understand program (37%)
2. Program was poorly understood by some clinicians/nurses (25%)
3. Takes too much time and doesn't fit into everyday workflow (8%)

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Assessment Concerns for JM with Integrated Care Approaches

1. Residual medical health issues
   (Primary care co-manage)
2. Substance use risk (increased intake)
   (referral for assessment of OUD, potential MAT?)
3. Mood risk
   (Assessment, behavioral therapy, medication, ?)
4. Residual untreated pain
   (ALTOs, acupuncture, massage, nutrition/diet, ?)
5. Any others?
   (Spiritual, Support groups, Social determinants, ?)

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Addressing Barriers to Integrated Care Pain Approaches

1. Reimbursement
   - Legislative Session work to increase/provide reimbursement
   - Acupuncture, chiropractic, physical therapy and other services
2. Personnel- capacity
   - Funding for training and loan repayment for providers
   - SBIRT and MAT training
3. Education and Prevention
   - Legislative Session work for prevention/primary intervention
   - Provider education by ALTOS and CURES
     - Clinicians United to Resolve the Epidemic

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Conclusions

- A decade ago, well-intentioned providers increasingly started prescribing opioids to manage acute/chronic pain, supported by professional associations and pharmaceutical companies.
- This has yielded an increase in opioid misuse and abuse. Despite this increase, access to treatment is lacking.
- Individuals are seeking primary care for opioid-related problems; primary care providers need to take an active, intentional role in dealing with the issue.
- An integrated primary care model that includes medication assisted treatment (MAT) services for substance use disorders can significantly improve substance use outcomes.

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