# What's a Doctor to Do: Alternatives to Opioids in the Management of Pain

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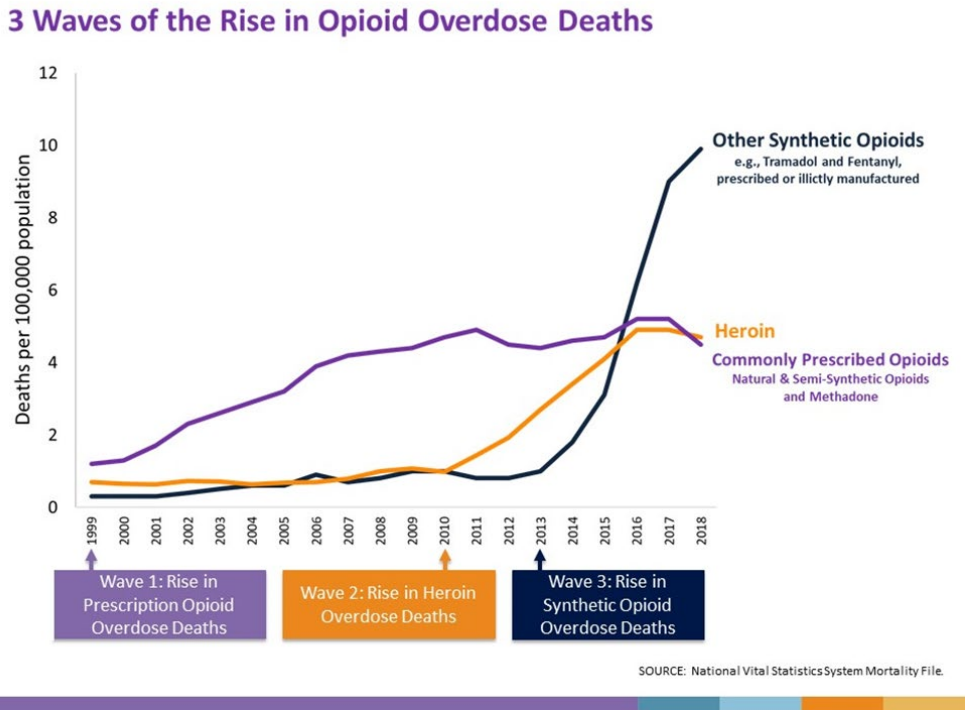
# 3 Waves of the Rise in Opioid Overdose Death



# Non-Opioid Analgesics

- **Over-the-Counter (OTC) products**
- **Topical products**
  - Topical Non-Steroidal Anti-Inflammatory Drugs (NSAIDs)
  - Lidocaine
  - Compounds
- **Anti-Epilepsy Drugs (AEDs)**
  - Gabapentinoids
- **Antidepressants**

# OTC Products

- **Acetaminophen (APAP)**
  - may be considered for initial therapy for patients with mild to moderate pain in patients with risk factor for use of NSAIDs (gastrointestinal, cardiovascular or renovascular risk factors).

# OTC Products

- **APAP: Comments for Prescriber per ACOEM**
  - Caution is warranted for patients with liver disease, acetaminophen may not be indicated, or lower doses are recommended.
  - First-line therapy for patients with known or multiple risk factors for cardiovascular disease.
  - Over-the-counter analgesics may be helpful, prescription analgesics may be needed for moderate to severe pain.
  - Scheduled dosage is recommended acutely, especially when symptoms are significant. As needed is reasonable for mild to moderate symptoms.

# OTC Products

- **NSAIDs per ODG**
  - Recommended at the lowest dose for the shortest period in patients with moderate to severe pain.
  - There is no evidence to recommend one NSAID over another based on efficacy. In particular, there appears to be no difference between traditional NSAIDs and COX-2 NSAIDs in terms of pain relief.
  - The main concern of selection is based on adverse effects. COX-2 NSAIDs have fewer GI side effects. The FDA has concluded that long-term clinical trials are best interpreted to suggest that cardiovascular risk occurs with all NSAIDs. The difference in risks between different NSAIDs in terms of cardiovascular adverse effects remains uncertain in spite of recent randomized controlled trials (in part, due to failures of equipotent dose comparison, and large dropout rate in the COX-2 arms of study).
  - There is no evidence of long-term effectiveness for pain or function.

# OTC Products

- **NSAIDs per ACOEM**
  - Can increase the risk of heart attack or stroke in patients with or without heart disease or risk factors for heart disease. Risk may be increased with higher doses and increased duration.
  - Over the counter analgesics may be helpful, prescription analgesics may be needed for moderate to severe pain.
  - Potentially lower cardiovascular risk with naproxen compared to other non-selective and COX-2 selective NSAIDs.
  - Scheduled dosage is recommended acutely, especially when symptoms are significant. As needed is reasonable for mild to moderate symptoms.

# OTC Products

- **Comments for Claims Professional**
  - Over-the-counter analgesics may be helpful, prescription analgesics may be needed for moderate to severe pain.

# Topical Products

- **Topical NSAIDs according to ODG**
  - **Recommended:** Topical diclofenac gel 1% (Voltaren ® gel) as a first-line treatment for osteoarthritis of amenable joints (ankle, elbow, foot, hand, knee, and wrist).
  - **Not recommended:** Pennsaid® (diclofenac topical solution) is not recommended as a first-line drug for osteoarthritis of the knee.
  - **Not recommended:** Flector® Patch (diclofenac topical patch 1.3%) as a first-line treatment for acute sprains, strains, or contusions.
  - **Not recommended:** Compounded NSAID formulations.

# Topical Products

- If a prescription drug is required, commercially available, FDA-approved drugs for treatment of the disease process should be documented as trialed and failed prior to trials of compounded drugs.

# Topical Products

- **Diclofenac**
  - Diclofenac gel is preferred over other topical diclofenac products.
  - Diclofenac is not recommended as first- or second-line due to increased risk for hepatotoxicity.
  - Diclofenac is the only FDA approved topical NSAID. All other agents are considered investigational and use is not recommended.
- **NSAIDs can increase the risk of heart attack or stroke in patients with or without heart disease or risk factors for heart disease. Risk may be increased with higher doses and increased duration.**

# Topical Products

- **Lidocaine Topicals per ACOEM**
  - Consider over-the-counter and lower-cost agents, i.e., lidocaine 4% patch or cream, as first-line therapy.
  - Lidocaine patches are recommended when there is localized pain amenable to topical treatment.
  - Should generally have failed NSAID, therapeutic exercise, tricyclic antidepressants, anti-convulsants and topical NSAID.

# Anti-Epilepsy Drugs

- **AEDs for Pain per ODG**
  - Recommended for FDA-approved uses:
    - Postherpetic neuralgia (gabapentin and pregabalin)
    - Fibromyalgia (pregabalin)
    - Neuropathic pain associated with diabetes or spinal cord injury (pregabalin). Spinal cord injury is defined as injury to the spinal cord, and not to spinal nerve roots. All other uses are off-label and evidence for use is very limited.

# Anti-Epilepsy Drugs
(Continued)

- **Off Label Use:**
  - Recommended on a limited trial basis for the following:
  - Cervical spondylitic myelopathy and syringomyelia.
  - Radiculopathy/sciatica due to disc herniation or spinal stenosis.
  - Neurogenic claudication due to spinal stenosis.
  - Central pain and complex regional pain syndrome.
  - Complex Regional Pain Syndrome (CRPS)
- **Not recommended for chronic, non-specific, axial low back pain**
- **Not recommended for acute nociceptive pain**

# Anti-Epilepsy Drugs

- **Carbamazepine**
  - Recommended for treatment of chronic persistent pain.
  - Generally recommended as a potential adjunct as a fourth- or fifth-line treatment for chronic persistent pain, after attempting other treatments (e.g., different NSAIDs, aerobic exercise, other exercise, tricyclic antidepressants).

# Anti-Epilepsy Drugs

- **Gabapentin**
  - Newer, branded products, e.g., Horizant or Gralise, are not preferred over generic gabapentin.
  - Selectively recommended for moderate to severe pain with neuropathic features that has not responded to other treatments, e.g., NSAIDs, therapeutic exercises, and tricyclic antidepressants.

# Anti-Epilepsy Drugs

- **Lamotrigine**
  - Generally recommended as a potential adjunct as a fourth- or fifth-line treatment for chronic persistent pain, after attempting other treatments (e.g., different NSAIDs, aerobic exercise, other exercise, tricyclic antidepressants).
  - May be trialed if the results from carbamazepine are insufficient.

# Anti-Epilepsy Drugs

- **Oxcarbazepine**
  - Generally recommended as a potential adjunct as a fourth- or fifth-line treatment for chronic persistent pain, after attempting other treatments (e.g., different NSAIDs, aerobic exercise, other exercise, tricyclic antidepressants).
  - May be trialed if the results from carbamazepine are insufficient.

# Anti-Epilepsy Drugs

- **Pregabalin**
  - Selectively recommended for moderate to severe pain with neuropathic features that has not responded to other treatments, e.g., NSAIDs, therapeutic exercises, and tricyclic antidepressants.
- **Topiramate**
  - Topiramate is selectively recommended for treatment of chronic persistent pain with depression or anxiety.

# Antidepressants

- Low-dose TCAs, SSNRIs (duloxetine and venlafaxine) showed efficacy for the management of NP and were recommended as first-line and second-line medications, respectively.

# Nonpharmacologic Pain Management

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# Background

- According to the Institute of Medicine of the National Academies, more Americans (100 million) suffer from chronic pain than from cancer, heart disease and diabetes combined[1]
- Opioids and other pain relievers are often prescribed (~ 90 percent of the time) to treat chronic pain [2]
- The number of employees who suffer from chronic pain as a result of a serious workplace injury has increased from less than 10 percent a decade ago to more than half today [3]

1. Institute of Medicine Report from the Committee on Advancing Pain Research, Care, and Education: Relieving Pain in America, A Blueprint for Transforming Prevention, Care, Education and Research. The National Academies Press, 2011. http://books.nap.edu/openbook.php?record_id=13172&page=1.

2. 5 Surprising facts on prescription painkillers: Why you should be concerned about opioids—the most prescribed drugs in America: Published: January 2014

# Economic Impact of Epidemics of Chronic Pain & Opioid Misuse

Chronic pain and opioid misuse together cost the US economy more than **$1 trillion annually.**

- **560-635 billion** in direct medical costs and loss of productivity each year. [3]
- **55 billion** in health and social costs related to prescription opioid abuse each year[1]
- **20 billion** in emergency department and inpatient care for opioid poisonings[2]

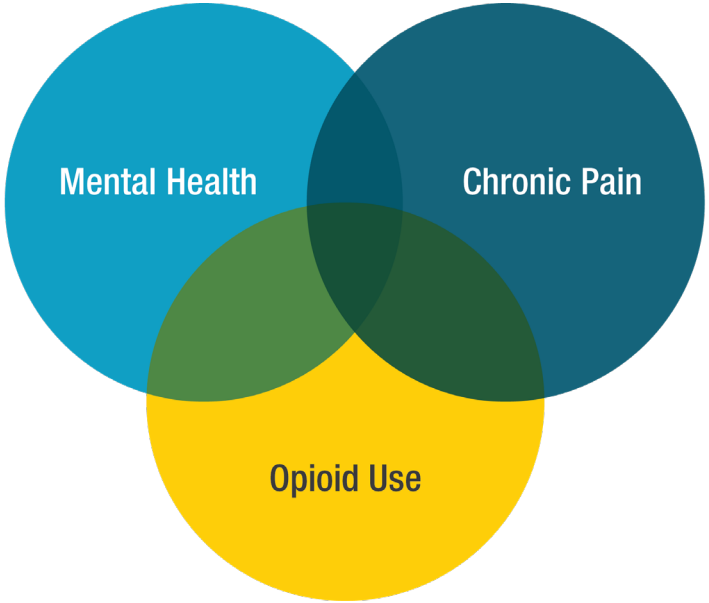
**Source:** Pain Med. 2011;12(4):657-67.[1] 2013;14(10):1534-47.[2]
Source:https://www.whitehouse.gov/sites/whitehouse.gov/files/images/The%20Underestimated%20Cost%20of%20the%20Opioid%20Crisis.pdf
Source: National Academy of Medicine Report: *Relieving Pain in America, A Blueprint for Transforming Prevention, Care, Education and Research*. The National Academies Press, 2011.

# U.S. Overdose Deaths

- 70,237 drug overdose deaths occurred in the United States in 2017.
- The age-adjusted rate of overdose deaths increased significantly by 9.6% from 2016 (19.8 per 100,000) to 2017 (21.7 per 100,000).
- Opioids—mainly synthetic opioids (other than methadone)—are currently the main driver of drug overdose deaths.
- Opioids were involved in 47,600 overdose deaths in 2017 (67.8% of all drug overdose deaths).

https://www.cdc.gov/drugoverdose/data/statedeaths.html

# Intersection of Mental Health, Opioid Use, and Chronic Pain



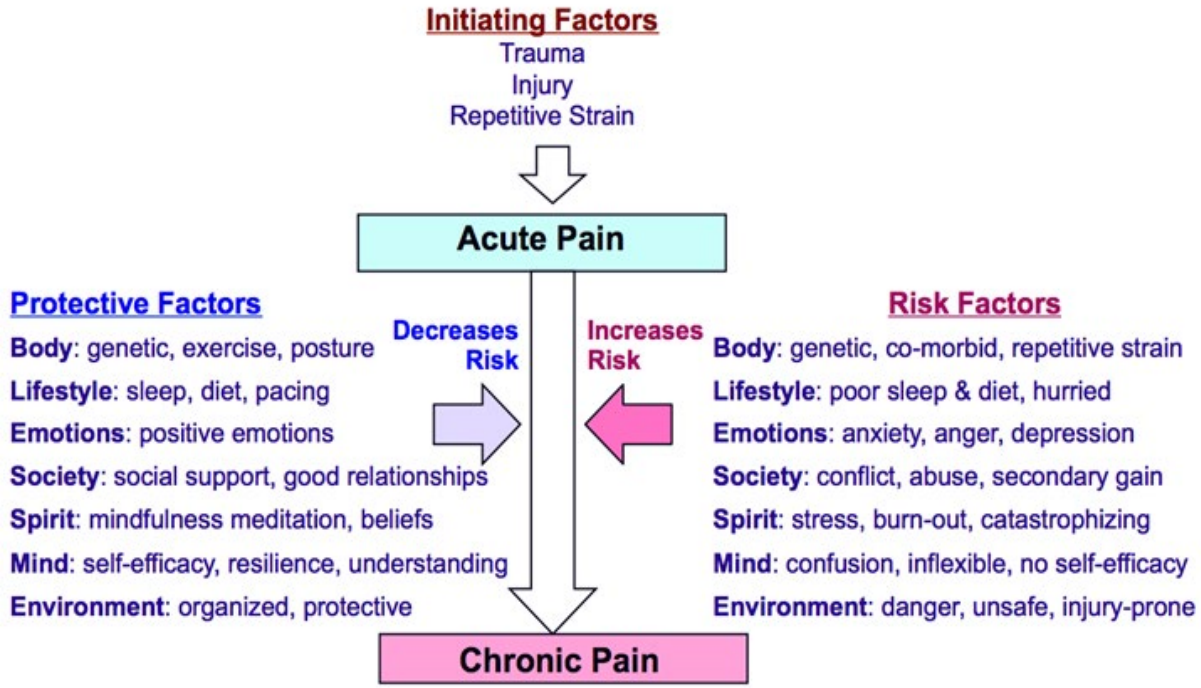
# Principles of Good Pain Management

- View your client as a whole person.
- Treatment of pain is more effective when all contributions to and effects of pain are addressed.

# Human Systems: Paradigm Shift

- New paradigm
- Understand the whole patient
- Every patient is complex
- Self responsibility
- Education and training
- Long-term change
- Strong provider-patient partnerships
- Personal motivation
- Social Support

# Human Systems Approach



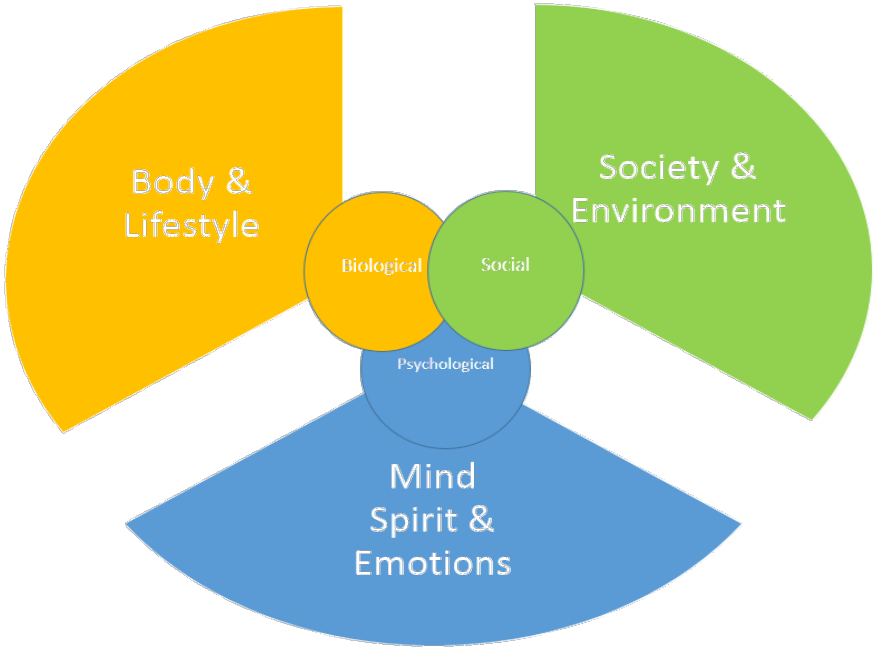
# Protective Features

- **Body:** exercise, posture, health
- **Lifestyle:** good sleep, diet, balance
- **Emotions:** joy, happiness, calm
- **Society:** social support, relationship
- **Spirit:** purpose, direction, passion
- **Mind:** optimism, self-efficacy, honesty
- **Environment:** organized, clean, safe

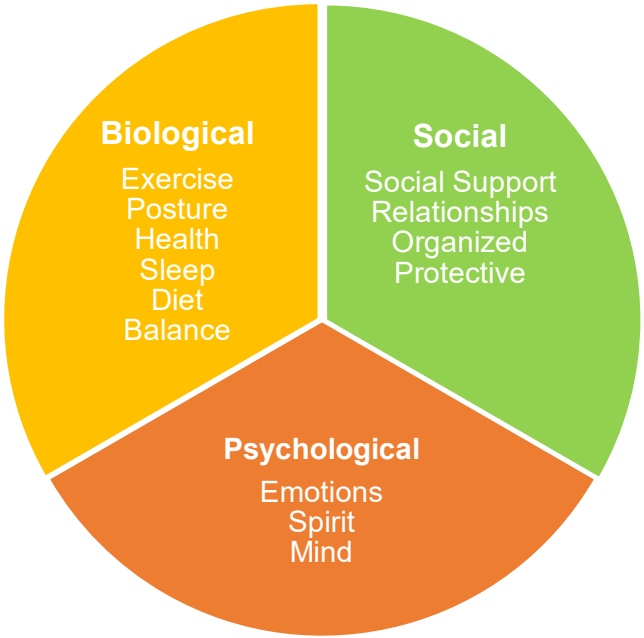
# Risk Factors

- **Body:** low fitness, co-morbidities
- **Lifestyle:** poor sleep, diet, strain
- **Emotions:** anxiety, anger, depression
- **Society:** stress, abuse, secondary gain
- **Spirit:** burnout, lost, no purpose
- **Mind:** unrealistic expectation, confusion
- **Environment:** chaotic, injury prone

# Human System Reconciled



# BioPsychoSocial Human Systems Reconciliation



# What Are Opioids?

**Opioids are a class of drugs that bind to opioid receptors in the brain. There are three broad classes: natural, semi-synthetic, and synthetic.**

- **Natural Opioids:** Derived from naturally occurring opiates found in the opium resin of the opium poppy.
  - Examples: morphine (*MS Contin*, *Avinza*) & codeine (*Tylenol 3*).
- **Semi-synthetic Opioids:** Hybrid opioids resulting from chemical modifications to naturally occurring opium alkaloids.
  - Examples: Hydrocodone (*Vicodin, Lortab*), hydromorphone (*Dilaudid*), oxycodone (*OxyContin, Percocet*) & oxymorphone (*Opana*). Heroin is in this class of drugs.
- **Synthetic Opioids:** made from other chemicals and molecules unrelated to opium alkaloids.
  - Examples: methadone and fentanyl (*Actiq*).

# Social Determinants of Health

## Social and Behavioral Domains (1)

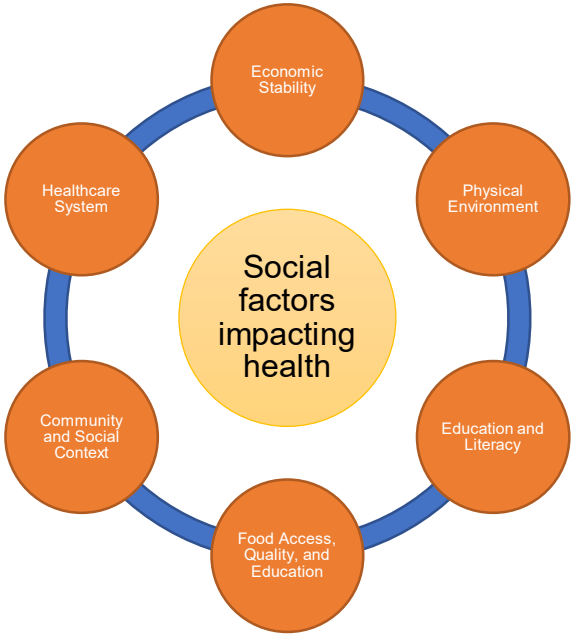
- Housing instability, homelessness, poor quality, inability to pay mortgage/rent
- Food insecurity, food deserts, lack of quality
- Transportation needs, both medical and non-medical
- Utility needs, paying bills, communication assistance
- Interpersonal safety, partner violence, elder or child abuse

## Qualitative Themes (2)

- Disengagement with the challenges of treatment and recovery
- Lack of personal relationships, family/friends turned into caregivers
- Struggling to find safety, security, and purpose
- Grieving for what was and could have been
- Complexity of multiple health issues


1. Rhode Island Medical Journal. 2019. Addressing the social determinants of health: The Rhode Island State Innovation Model experience. RIMJ Archives.
2. BMC Psychiatry. 2018. Understanding the ups and downs of living well: the voices of people experiencing early mental health recovery.

# The Hartford's Approach to Social Competency




**Focus on a whole-person approach to recovery of the patient to increase resiliency and self-efficacy:**

- Claim management
- New programs
- Advocacy and alignment
- Engagement with patient, employer, and physicians

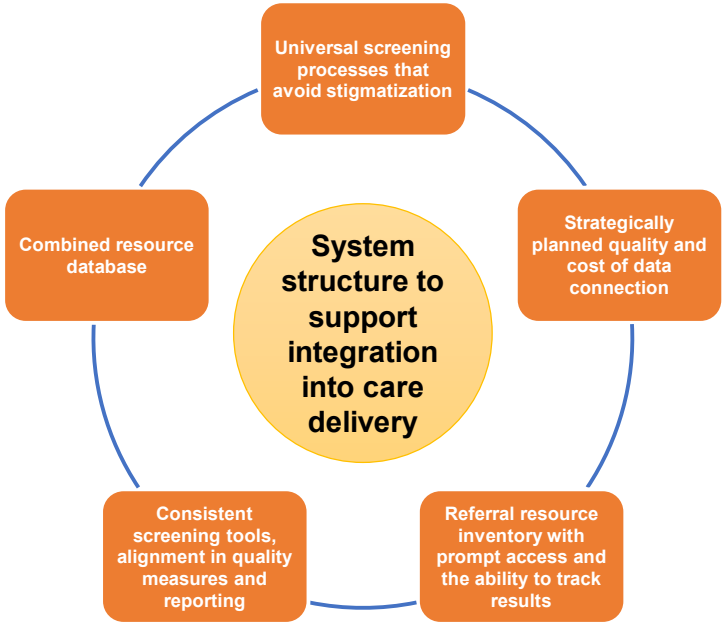
# Integrating Social Competency

| Social Health Integration | |
|---|---|
| Awareness | Social issues to be resolved that influence insured's health and recovery |
| Adjustment | Alter clinical care to accommodate social barriers |
| Assistance | Reduce social risk by providing services |
| Alignment | Deploy resources in the community and facilitate integration |
| Advocacy | Partner with government affairs, legal, public affairs, and market position |

Effective integration requires interprofessional teams, digital infrastructure and data, financing, and research.

National Academies of Sciences, Engineering, and Medicine. 2019. Integrating social care into the delivery of health care: Moving upstream to improve the nation's health. Washington, DC: The National Academies Press.

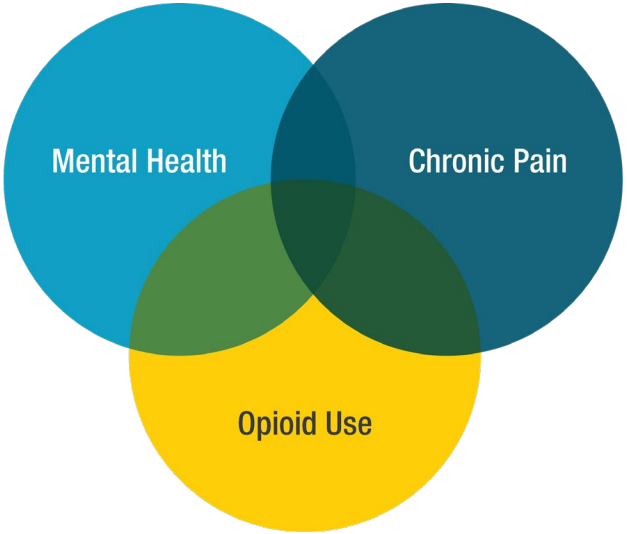
# Social Determinants of Health System Structure




Rhode Island Medical Journal. 2019. Addressing the social determinants of health: The Rhode Island State Innovation Model experience. RIMJ Archives.

# Chronic Pain, Opioid Use, Mental Health

## Commonalities and Differences = Requires Individualized Care




**Commonalities**

- Patients are stigmatized, misunderstood
- Requires Whole Person, Biopsychosocial + spiritual approach; thorough assessment and integration of care
- Complexities, comorbidities, and overlapping conditions
- Value-based care is key but needs refinement for models and cultural shift
- Fragmentation in care = poor outcomes

**Despite some intersections,**

- Pain ≠ Opioid Use
- Opioid Use ≠ SUD
- Mental Health ≠ Pain & SUD

# What Is Comprehensive Integrative Pain Management

- Foundation in biopsychosocial
- Oriented to the whole person
- Includes biomedical, psychosocial, complementary health, spiritual care
- Care plans developed through shared decisionmaking
- Includes evidence-informed optimal practice and the individual's goals and values

# Current Landscape

There has been much work done to support effective pain management in the last 20+ years, but the current climate towards improving care for people with chronic pain in the U.S. continues to be complicated.

# Nonpharmacologic Treatments

- Stimulators
- Pain pump
- Surgery
- Injections
- Physical Therapy/OMT

# Behavioral Interventions

- Relaxation training
- Mindfulness

- Cognitive-Behavioral Therapy
- Hypnotherapy/medical hypnosis

- EMDR: Eye Movement Desensitization and Reprocessing

# Groups, Therapy, and Education

- Family therapy
- Psychoeducation
- Support groups/group therapy
- Collaborate with others

# Digital Therapeutics

- **Prescription**
  - Pear Therapeutics
  - ReSet and ReSet-O

- **Important**
  - Sleep
  - Circadian Rhythm
  - Sleepio

# Key Messages

- **When pain is properly managed, many people can resume their lives.**
- **Finding good pain care is challenging**
  - Importance of The Hartford Dr. Networks
  - Hartford Select Networks

# Questions?

## Coming Soon

# 2020 Annual Drug Trend Report


For more information, go to our website at www.mymatrixx.com/drug-trend-report.