Pain and Responsible Management 101

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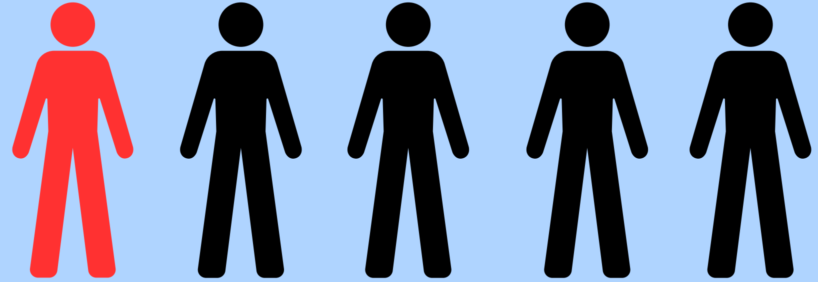
Why Physicians Must Care About Pain

1 out of 5

adults suffer from chronic pain

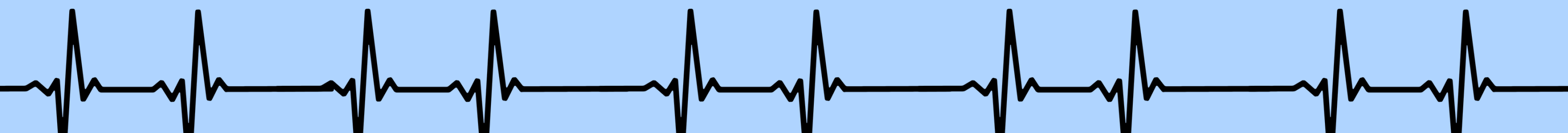


That's 50 million people in the United States

Pain costs over $5 billion a year in healthcare and disability related costs.

Complications of Pain:

1. Restriction of daily activities
2. Dependence on opioids
3. Mental health disorders
4. Poor perceived quality of life



Impacts of Chronic Pain

Lower quality of life (QOL) has been noted for all types of pain including neuropathic, musculoskeletal, and malignant pain.

Pain impacts all age groups

A study including 49,971 nursing home patients revealed that 26% of the residents had chronic pain. This pain was associated with activities of daily living (ADL) impairment (OR 2.47), increased depressive symptoms (OR 1.66), and decreased activity involvement (OR 1.35) .

A study of 128 adolescents found that as pain increased, QOL decreased. Mothers of these paticpants reported decreased QOL for the entire family.

Financial Impact :

-An estimated **4 billion** work days are lost annually due to pain.

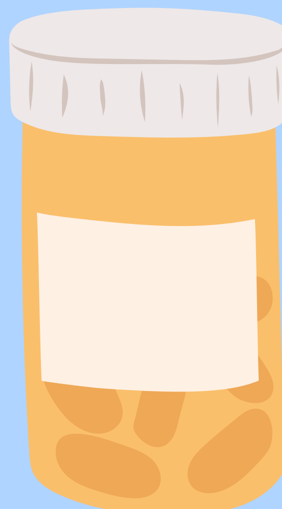
-Many patients report financial stress due to the inability to work.

-A study found that 83% of its 33,014 participants with chronic pain were unable to work outside the home; 42% were unable to pursue educational goals due to pain limitations.

-It is estimated that patients with chronic pain spend **$7,000 more** on annual healthcare costs.

Psychosocial Impacts:

2x risk of suicide
4x more likely to have depression or anxiety



There is a risk of patients developing opioid dependence and addiction when using opioids for chronic pain.

Types of Pain

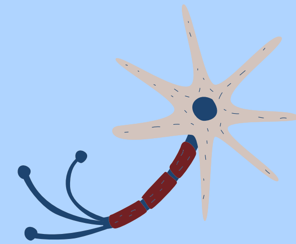
Understanding pain can assist physicians with management and patient education.
Here is a brief overview with examples:

Musculoskeletal Pain

Back pain, myofascial pain

Neuropathic Pain

Diabetic neuropathy, Post-herpetic neuralgia



Chronic MSK pain is nociceptive

Nociceptive Pain

Tissue damage- burns, bruises, sprains

Inflammatory Pain

Infections, Autoimmune

Chronic pain:
lasting > 3 months

Psychogenic Pain

Emotional distress causing headaches

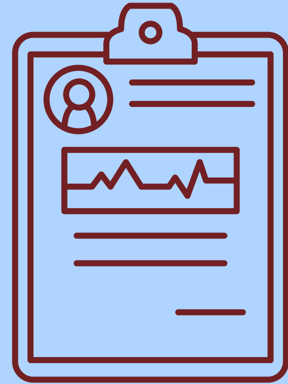
Malignant Pain

Due to expansion, compression

Reported by about 90% of cancer patients

Taking a Pain History

Taking a complete, non-judgmental pain history can build rapport with your patient.



Basic History of Pain:

Onset, Location, Duration, Characteristics, Aggravating Factors, Relieving Factors, Timing, Severity (OLD CARTS)

What medications have you tried?

What other medical conditions do you have?

Assess for red flags depending on pain description

Additional Questions for Patients Presenting with Pain:

How does pain affect your sleep?

How does pain affect your mood?

How does pain affect your physical function?

How does pain affect your social function?

What do you think is causing your pain?

What are your pain management goals?

Do you have any history of anxiety, depression, or trauma?

Have you had any previous use disorders or problems with drugs or alcohol?

What is your support system like?

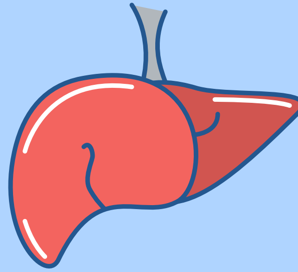
Here is a video example of these concepts.

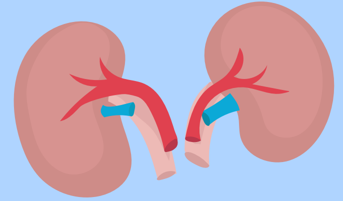
History Tips (cont.).

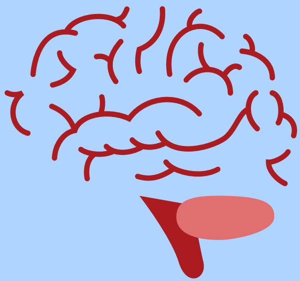
Assess for contributory medical & mental health conditions

Medical Conditions

Consider renal and hepatic status for ability to clear analgesics and their metabolites.







Mental Health

1. Patients with mental health co-morbidities are at a higher risk for addiction to prescribed opioids.
2. Patients at a higher risk for prolonged and high dose opioid therapy.
3. Patients who use opioids to blunt unpleasant thoughts may have more difficulty stopping the drug.

These are not contraindications but you should access risk factors carefully in these patients.

Pain Assessment Tools

Visual Analogue Scale (VAS)

Patients can define extreme limits of pain using facial expressions. Learn more: Introduction & Research

Brief Pain Inventory (BPI)

Patients rate the severity of their pain and the degree to which their pain interferes with common dimensions of feeling and function. Example.

Leeds Neuropathic Pain Scale

Assess sensory dysfunction. Example.

General Pain Management Guidlines

These are general guidelines for outpatient opioid prescribing for patients >18 without sickle cell disease or end-of-life care.

1. Whether or not to prescribe opioids for pain

- Nonopioid therapies are at least as effective as opioid for acute pain.
- Opioids have a role in traumatic injuries and invasive surgeries.
- Nonopioid therapies are preferred for subacute and chronic pain.

2. Selecting opioids and dosages

- Clinicicians should prescribe immediate-release opioids for acute, subacute, or chronic pain
- Extended release and long acting reserved for severe, continuous pain
- Start at lowest effective dose for opioid naive patients
- Limited increase in effectiveness for dosing >50 MME/day

3. Deciding the duration of initial opioids and follow up

- Prescribe no greater quantity than needed for expected duration of severe pain
- Patient should be evaluated every 2 weeks for acute pain requiring opioids
- Patients should be evaluated within 1-4 weeks for subacute or chronic pain

4. Assessing risk and addressing potential harms

- **U**se validated tools to screen for drug and alcohol use
- Ensure treatment of mental illnesses
- Prescribe naloxone and discuss emergency plans

Avoid in patients with sleep disorders and elderly due to sedation

Full Recommendations can be found here: CDC Guideline for Prescribing Opioids for Chronic Pain — United States, 2016

Nonpharmacologic Therapies

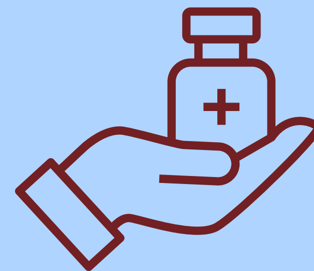
- Exercise can help chronic pain
  - Aerobic, aquatic, or resistance exercises
- Physical therapy
- Weight loss
- Psychological therapy
- Spinal manipulation
- Massage
- Mindfulness-based stress reduction,
  - yoga, acupuncture, tai chi
- Cognitive behavioral therapy (CBT)

Pharmacy Reporting Systems

-Physicians should utilize prescription drug monitoring programs (PDMP) before prescribing opioids.
-PDMP should be checked at least every 3 months.
-Patients should not be dismissed based on PDMP information alone.
-Confirm PDMP records with the patient.

2022 CDC Clinical Guidelines

WHO Analgesic Ladder



Toxicology Testing

-Toxicology testing should not be used in a punitive manner.
-Patients should not be dismissed based on results.
-Physicians should aim to avoid bias in testing and monitor use.
-Explain expected results to patients and ask questions about use in a non-judgemental way.

Other Considerations

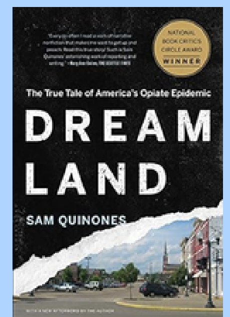
- Use caution when prescribing opioid pain medication and benzodiazepines.
- Buprenorphine or methadone for OUD should not be withheld from patients taking benzodiazepines.
- Physicians should arrange evidence-based treatment for OUD.
- Monitor patients with renal or hepatic insufficiency closely.

Risks of Overprescribing of Opioids

- Physician history of opioid prescribing mixed with misinformation advertised by Purdue Pharma contributed to the start of the ongoing opioid epidemic.
- Overprescribing can occur when opioids are not indicated (ex. in back pain) or too many pills provided (ex. 30 pills post minor surgery).
- Exposure to opioids increases risk of opioid use disorder, overdose, and adverse side effects such as GI dysfunction and cardiovascular disease.

Recommended reading:
Dreamland
By Sam Quinones

Dreamland: "From a small town in Mexico to the boardrooms of Big Pharma to main streets nationwide, an explosive and shocking account of addiction in the heartland of America."



Risks of Underprescribing of Opioids

- Patients and physicians can be overly cautious when using opioids which can lead to untreated pain when opioids may be clinically indicated.
- A study of cancer patients found they did not want opioids due to fear of side effects, fear physicians would not treat disease if they were "pain free", and fear of addiction.
- While addiction is a concern while taking opioids, physicians should discuss this risk thoroughly with patients who may benefit from opioid therapy.
- Opioids can be an effective and safe treatment when prescribed for correct indications and timing.
- Underprescribing can lead to anxiety, depression, and continued social and physical dysfunction due to untreated pain.

Disparities in Pain Management

- African American patients are at higher risk of under-treatment of pain in the U.S.
- In 2016, >20% of medical students believed black patients had less sensitive nerves than white patients.
- Misinformation about pain tolerance persists in medical education and contributes to continued bias.

Summary of several studies and key findings. Read more about other studies here.

Author	Participants	Key Outcomes
Rasu and Knell	Non-malignant chronic pain	Hispanic patients were less likely to receive opioids than were non-Hispanic patients. Patients over the age of 65 were less likely to receive opioids than were non-elderly patients.
Ly	Non-cancer abdominal or back pain	Hispanic and Black patients were less likely to be prescribed opioids than were White patients. Hispanic patients had shorter clinic visits than those of White patients when presenting with back pain.
Bauer et al.	Chronic non-cancer pain	Hispanics and Asians were less likely to receive higher-dose opioid prescription (≥50 mg morphine-equivalent daily dose) than were non-Hispanic Whites.

Video Resouces: Stanford (7 min), PBS (6 min), U Michigan (1.5 hours)

In summary:

1. Being a responsible opioid prescriber includes knowing when to and when not to prescribe opioids.

2. There are many racial disparities in opioid prescribing and monitoring so awareness of your implicit biases is key.

3. An opioid prescriber should be aware of harm reduction strategies and OUD treatment options closeby.

4. It takes all of us to help end the opioid epidemic.

Disclaimer: This toolkit focused on non-sickle cell pain and non-cancer related pain. It is meant for education purposes only, not to be used for medical advice.

Join our Substance Use Disorder Committee today!

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Thank you!