

# Safe and Effective Pain Management: Prescribing Opioids for Chronic Pain Based on CDC Guidelines

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Opioid  
Response  
Network  
STR-TA

# Working with communities to address the opioid crisis.

- ✧ SAMHSA's State Targeted Response Technical Assistance (STR-TA) grant created the *Opioid Response Network* to assist STR grantees, individuals and other organizations by providing the resources and technical assistance they need locally to address the opioid crisis .
- ✧ Technical assistance is available to support the evidence-based prevention, treatment, and recovery of opioid use disorders.

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# Working with communities to address the opioid crisis.

- ✧ The Opioid Response Network (ORN) provides local, experienced consultants in prevention, treatment and recovery to communities and organizations to help address this opioid crisis.
- ✧ The ORN accepts requests for education and training.
- ✧ Each state/territory has a designated team, led by a regional Technology Transfer Specialist (TTS), who is an expert in implementing evidence-based practices.



# Contact the Opioid Response Network

✧ To ask questions or submit a request for technical assistance:

- Visit [www.OpioidResponseNetwork.org](http://www.OpioidResponseNetwork.org)
- Email [orn@aaap.org](mailto:orn@aaap.org)
- Call 401-270-5900



# Prevalence of Opioid Use and Misuse

- ✧ Medical prescriptions of opioids started to increase sharply in mid-to-late 1990s (NIDA, 2014).
- ✧ Between 1999-2011, hydrocodone use increased 2-fold; oxycodone use increased more than 5-fold (Jones, 2013)
- ✧ Mortality of opioid related OD almost 4-fold (Chen et al., 2014)
- ✧ National Trends annually
  - Daily – 90 Americans die from OD involving opioids (Rudd et al., 2016)
  - Involves people across the lifespan and in every sociodemographic group
    - More heavily burden are economically depressed areas of the country.



# Other consequences...

- ✧ OD mortality increased
  - Highest among males < 50 years of age (CDC, 2015)
  - Highest among those recently released from prison
  - Highest among those who obtained prescriptions from multiple pharmacies
  - Highest among those who obtained prescription opioids in combination with other scheduled medications.
- ✧ Rates of ED visits for nonmedical opioid use (SAMHSA, 2013)
- ✧ Neonatal abstinence syndrome (NAS) (Patrick et al., 2012)
- ✧ OUD treatment admissions have dramatically increased since 2002 (SAMHSA, 2010)



# Age matters

- ✧ Greatest past-year nonmedical use of opioids is young adults 18-25
- ✧ Greatest use (i.e. exposure) of prescription opioids is among adults aged 26 and older.
  - Most people who report PO misuse in current cohorts initiated use in their early to late 20s (SAMHSA)
  - Prescription opioid mortality disproportionately affects adults aged 25-54 (CDC, 2016)



# Overdose deaths

- ✧ Misclassification with respect to intent (intention vs unintentional)
  - Especially for older, medically ill patients prescribed opioids
  - These deaths may not be followed up with toxicology testing
    - May not be referred to an ME as drug-involved or suspicious death.
  - Misuse and aberrant opioid use behaviors may manifest differently in older adults (Beaudoin et al., 2016; Henderson et al., 2015)
  - Role of suicidal intent in PO poisoning in older adults in an area of active inquiry (Rocket et al., 2010; West et al., 2015).

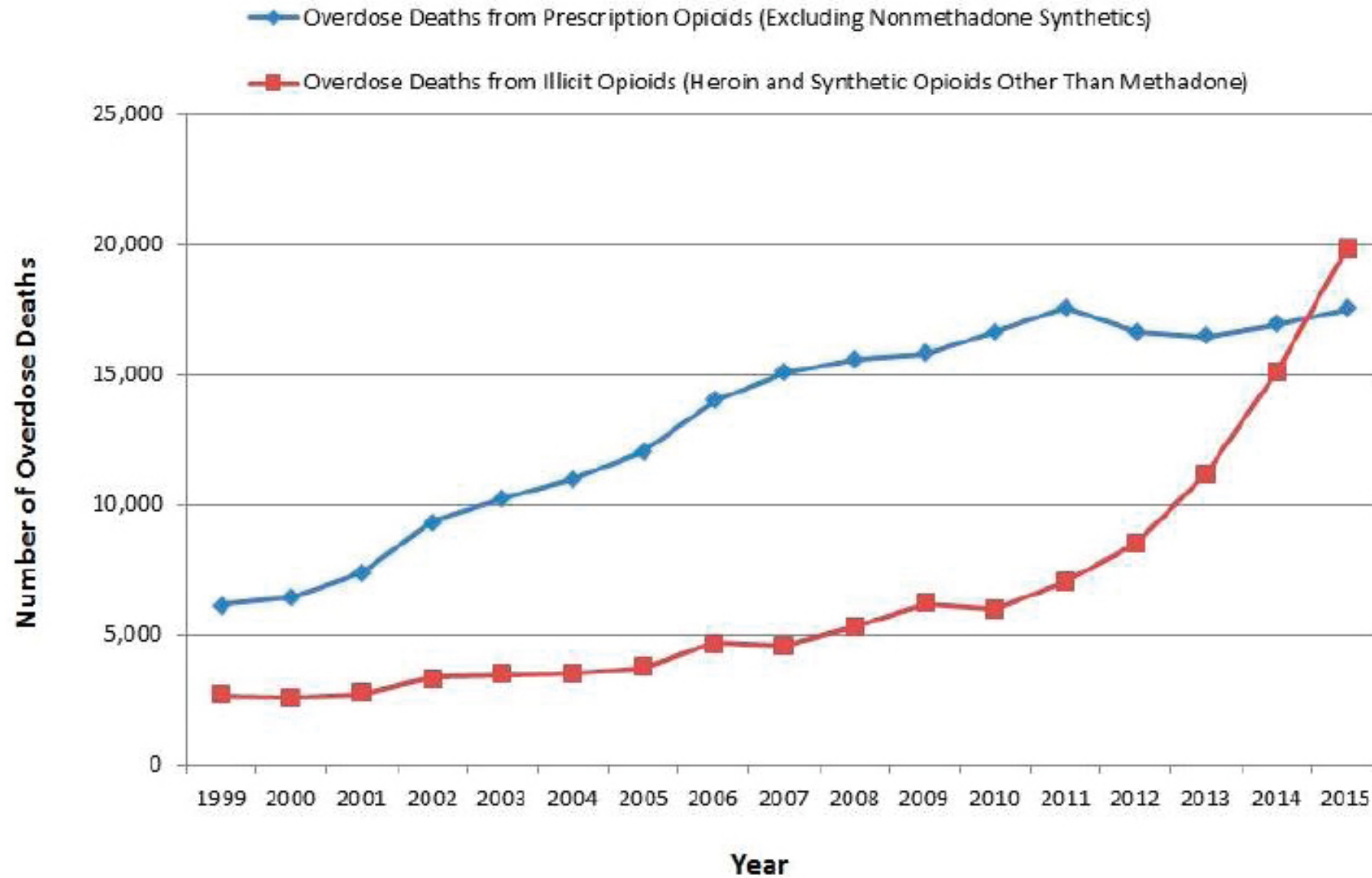




# Heroin

- ✧ Role of heroin in OD
  - 80% of current heroin users reported they began with PO (Muhuri et al., 2013).
- ✧ 2001-2011: Admission rates to treatment for OUD involving heroin doubled among non-Hispanic whites aged 20-34.
  - Stayed constant for other age groups among whites and for all age groups among non-Hispanic blacks.
- ✧ Rates of heroin OD deaths increased more than 2.5 fold among whites (ages 18-44; CDC, 2014; SAMHSA, 2013a)
- ✧ Cumulative effect is 200% increase in opioid-involved Ods from 2000-2014 (Rudd et al., 2015)
  - Concordant with increases in nonmedical PO use (Calcaterra et al., 2013; Cerdá et al., 2013; Kenan et al., 2013)





Source NCHS, 2016



# Prevalence of Chronic Pain

- ✧ WHO ranked 310 places for pain, with LB and neck pain as leading (Arnstein et al., 2017)
- ✧ 25 million adults endure chronic pain
  - 23 million report pain so intense they are unable to work or care for themselves.
- ✧ Up to half of those who have an acutely painful serious illness or major injury go on to develop chronic pain.



# Chronic Pain risk

- ✧ Highest risk are:
  - Older adults
  - People with history of childhood trauma
  - Those who experience suboptimal pain control and/or have psychosocial risk factors
- ✧ High-impact chronic pain (HICP) = 40 million adults
  - “Pain that is associated with substantial restriction of participation in work, social, self-care activities for 6 months or more (Macfarlane, 2016)
  - HICP degrades health, increases healthcare utilization, results in more disability than those with less severe pain.
  - Brain remodeling and loss of gray matter, producing changes in the brain similar to those observed with 10-20 years of aging.



# Complications from Chronic Pain

- ✧ Shortens life for many: Twice as likely to attempt suicide than those without pain
- ✧ After controlling for life-limiting diseases, those with severe chronic pain die at a 50% higher rate (especially from CV events) over 10 years, than those without pain (Torrance, et al., 2010).
- ✧ Data from 1999-2004 National Health and Nutrition Examination Survey (NHANES) n=15,311
  - Increased mortality risk among adults in the US.
  - This was attributed to limitations in physical functioning.



# Chronic pain: Spirituality

- ✧ Spirituality -- important component in the care of individuals with chronic pain (IOM, 2011).
- ✧ Spirituality -- patients with pain and SUD experienced a loss of spirituality (Sorajjakool et al., 2006).
- ✧ Spirituality is an integral component of care validates the complexity and significant impact pain has on one's life.



# Chronic Pain: Financial resources

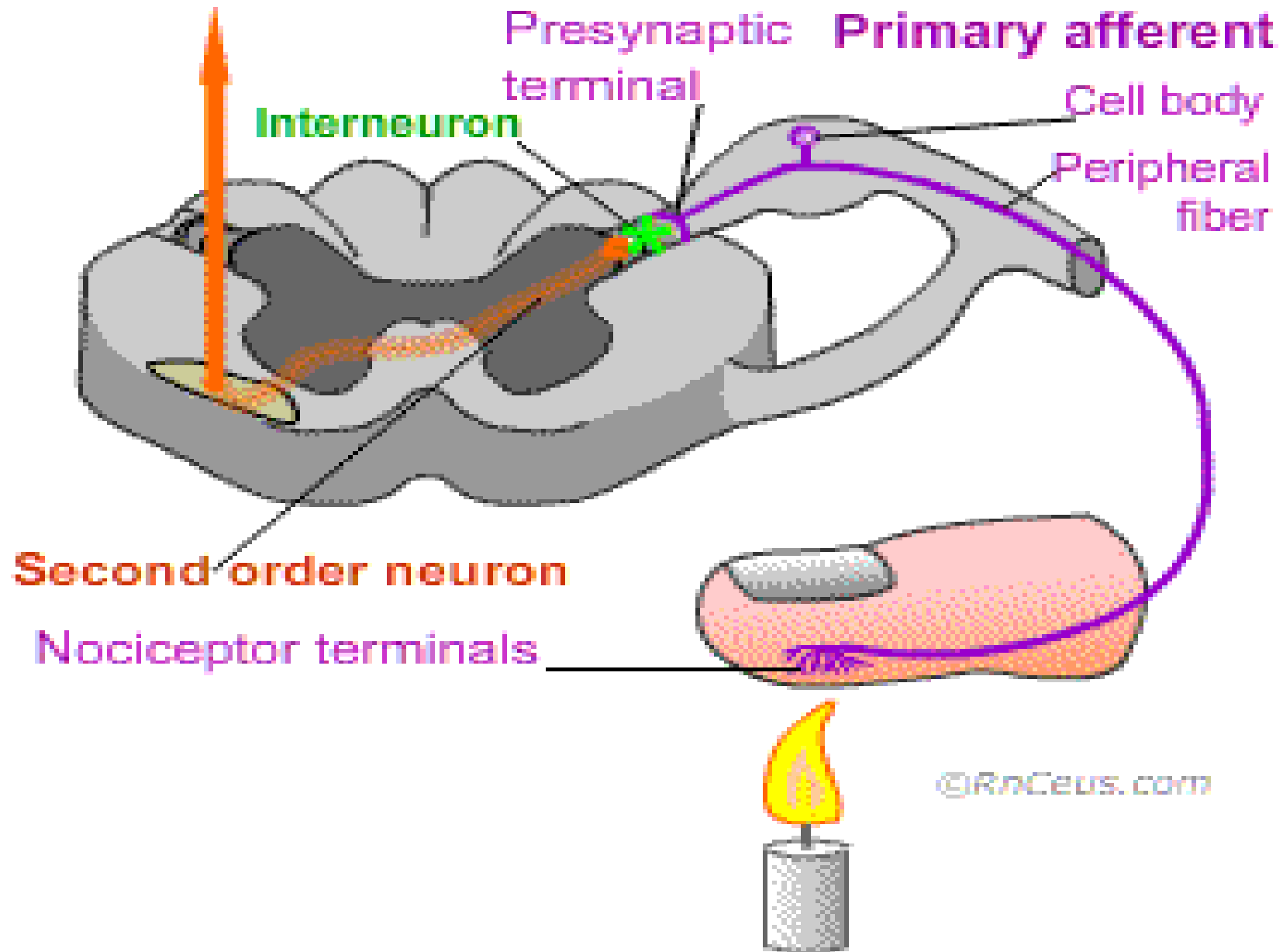
- ✧ Drain to individuals and society financial resources
- ✧ People with chronic pain incur \$10,000 per year in medical expenses
- ✧ Costs to our nation at least \$600 billion per year in healthcare and disability costs.
- ✧ Those with chronic pain are often unable to be financially independent





# Neuromechanisms of Pain

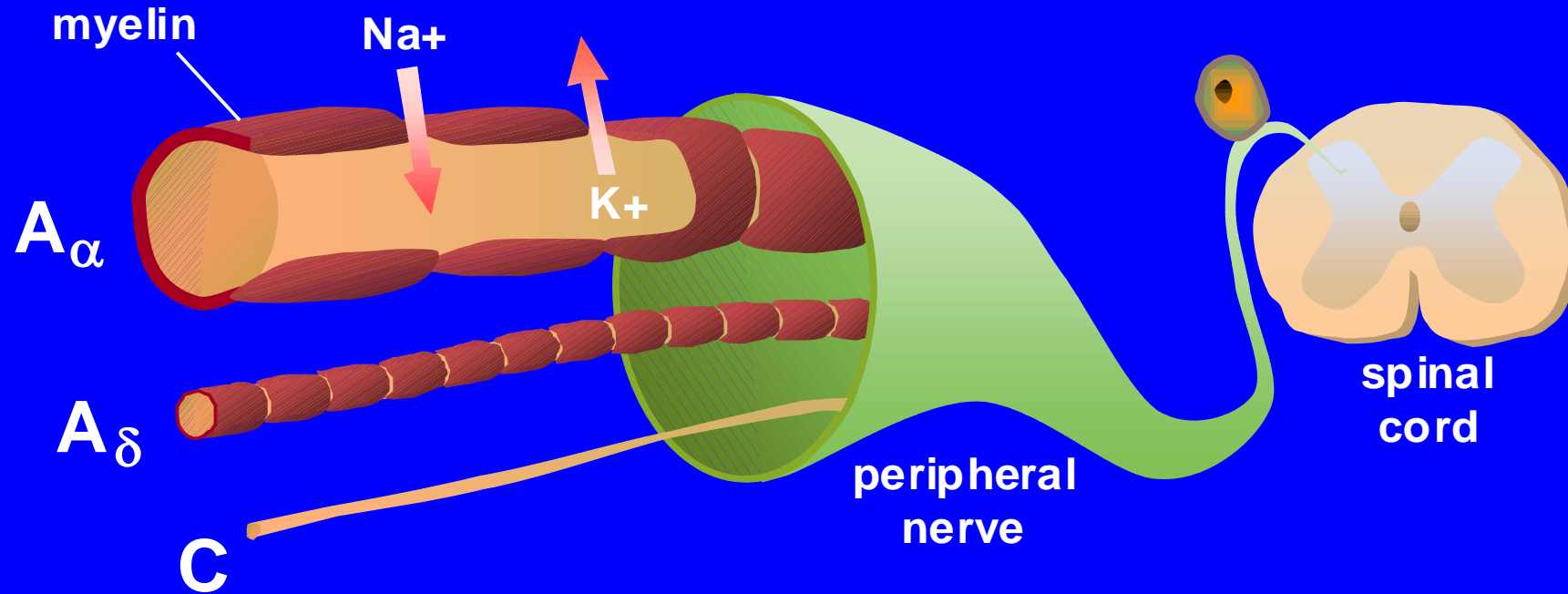




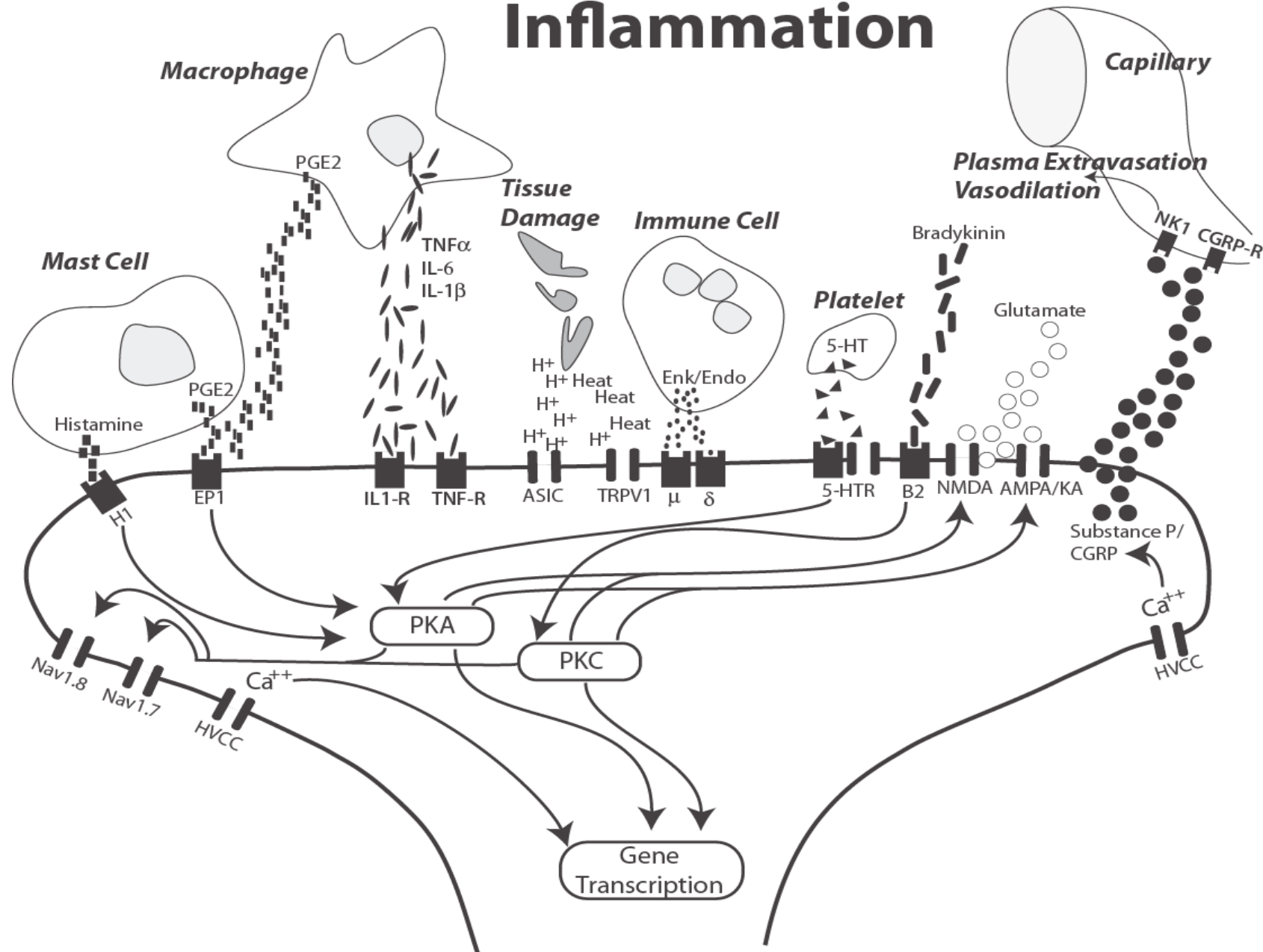
©RnCeus.com



# Peripheral Nerves: Transmission of Action Potential

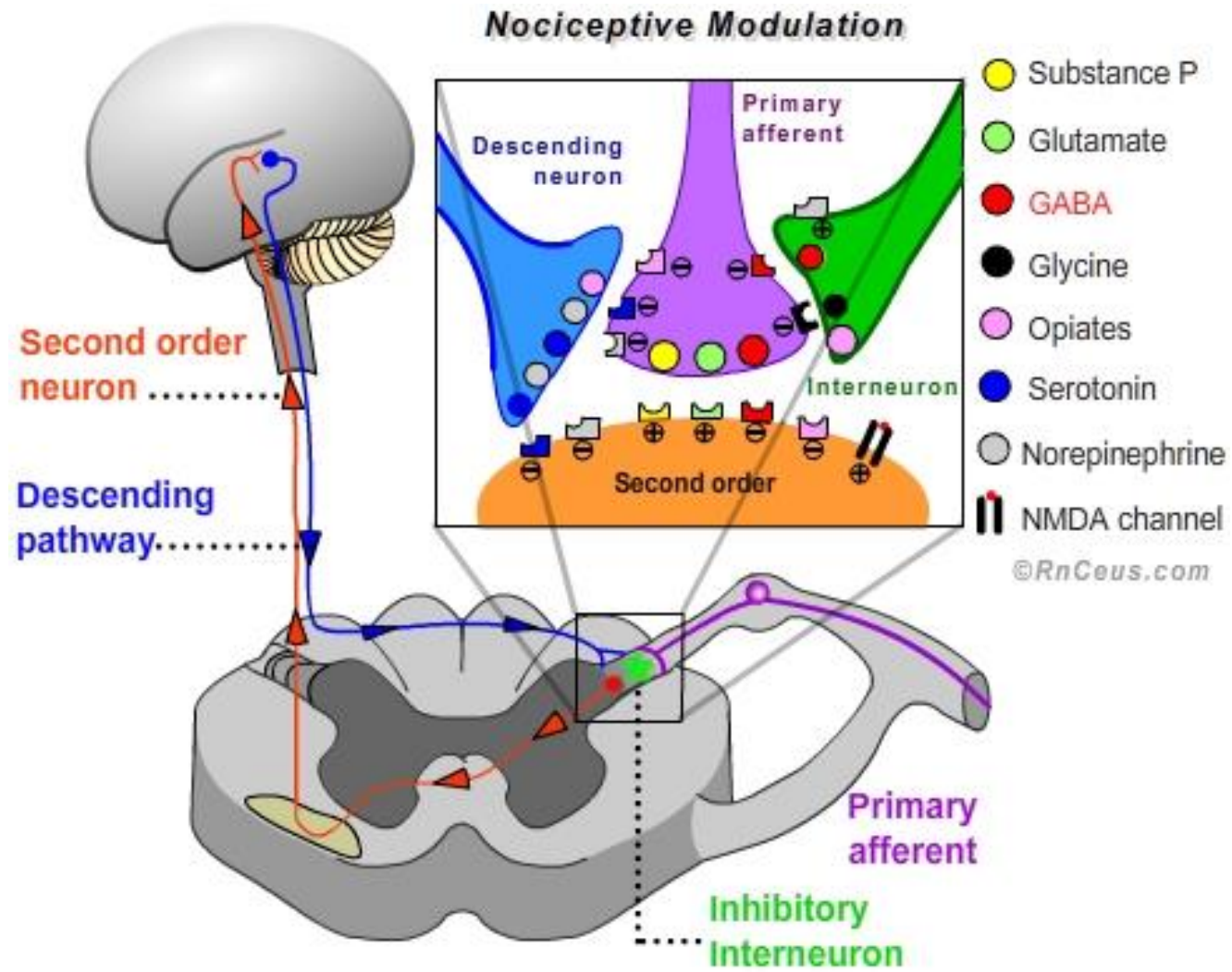


# Inflammation



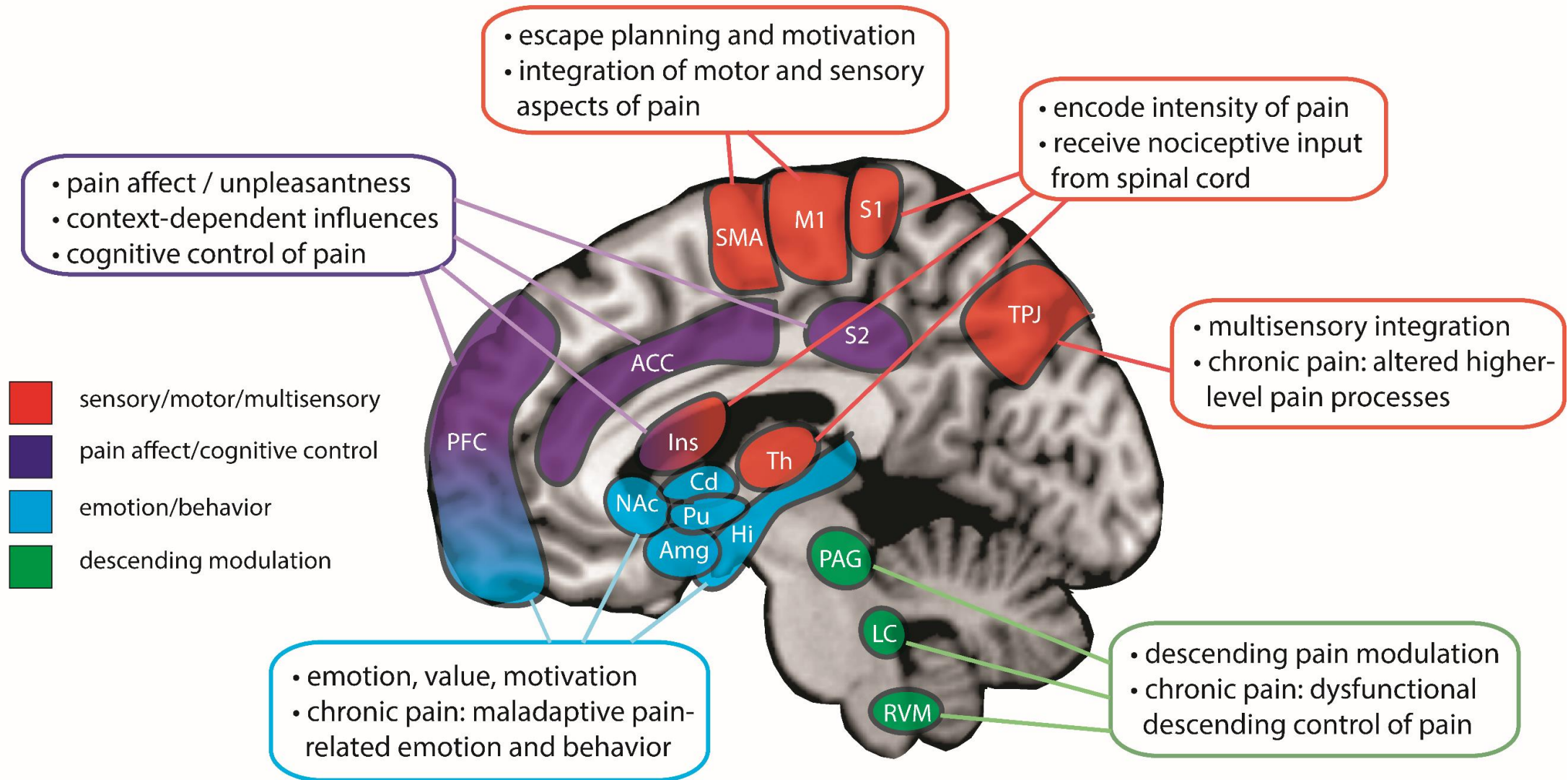
Sluka, K. 2013. Pain Mechanisms, University of Iowa, Neuroscience





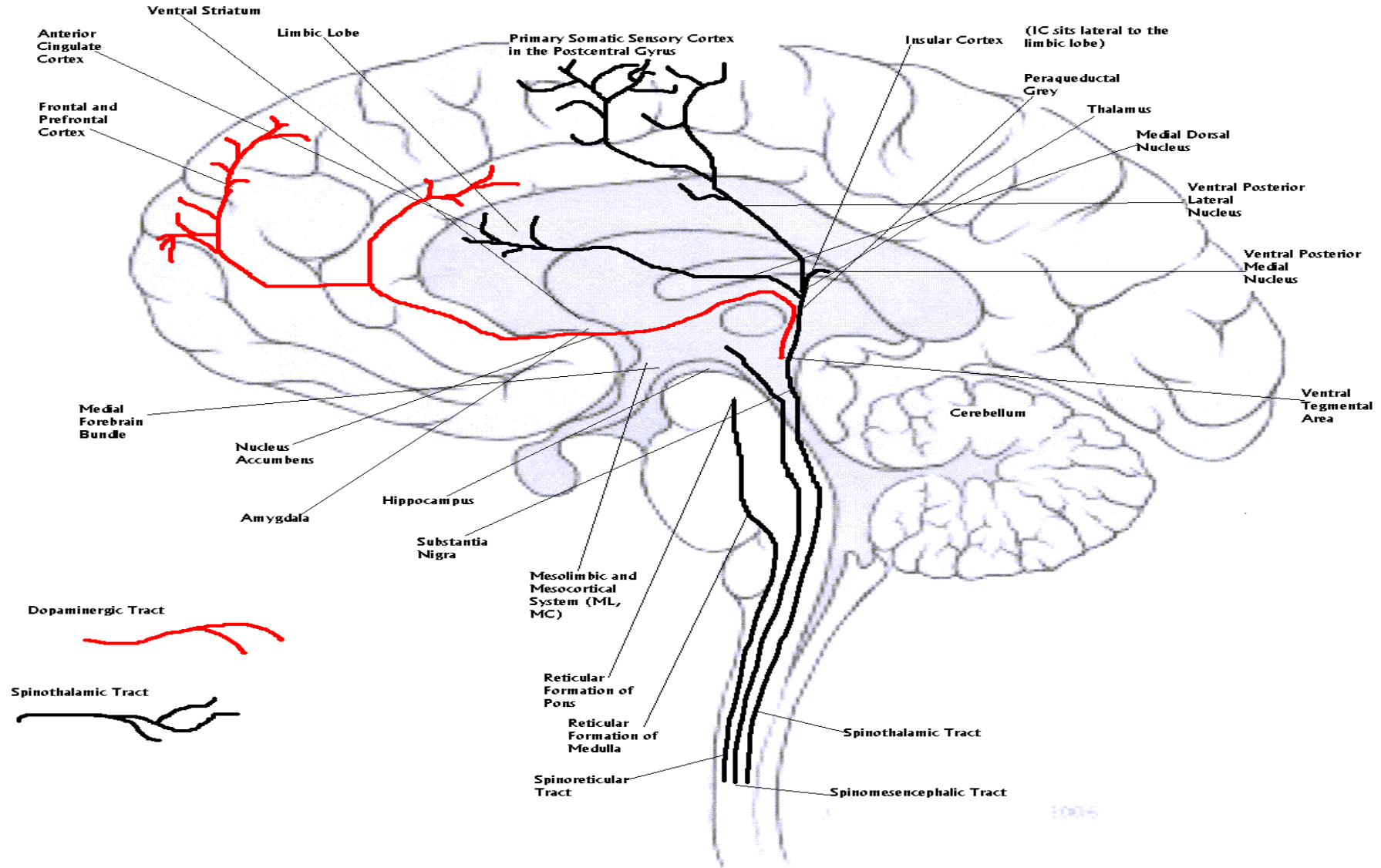
<http://www.rnceus.com/ages/nociceptive.htm>





Martucci and Mackey, *Anesthesiology* (2018)





© Barbara St. Marie, 2010



# Types of Pain and Treatment

| Nociceptive/Inflammatory   | Nociplastic   | Neuropathic   |
|--|---|---|
| <p>Non-steroidal Anti-inflammatory Drugs</p> <p>IR opioids</p> <p>Topical/transdermal</p> <p>Interventional Modalities</p> <p>Parenteral</p> | <p>SNRIs &amp; TCAs</p> <p>Antiepileptic Agents</p> <p>Anticholinergic agents</p> | <p>Antiepileptic agents</p> <p>Antidepressants</p> <p>ER/LA Opioids</p> <p>Transdermal</p> <p>Interventional Modalities</p> <p>Parenteral</p> |





# **CDC Opioid Guidelines**



# Introduction of the CDC Guidelines

## ✧ Guidelines address

- 1) 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

✧ CDC obtained input from experts, stakeholders, the public, peer reviewers, and a federally chartered advisory committee.



# CDC Guidelines Intention

To improve communication between clinicians and patients about the risks and benefits of opioid therapy for chronic pain, improve the safety and effectiveness of pain treatment, and reduce the risks associated with long-term opioid therapy, including opioid use disorder, overdose, and death



# Overview of Guidelines

- ✧ Scientific research has identified high-risk prescribing practices
  - high-dose prescribing,
  - overlapping opioid and benzodiazepine prescriptions,
  - extended-release/long-acting [ER/LA] opioids for acute pain
- ✧ Scope and Audience
  - Primary care clinicians (Physicians, Nurse Practitioners, Physician Assistants)
  - Treating patients with chronic pain (pain lasting >3 months or past the time of normal tissue healing)
  - Outpatient settings



# Adolescents

- ✧ Observational research -- significant increases in opioid prescriptions for pediatric populations from 2001 to 2010
- ✧ Headache and sports injuries
  - One study: 50% of adolescents presenting with headache received a prescription for an opioid pain medication
  - Adolescents who misuse opioid pain medication often misuse medications from their own previous prescriptions
  - Approx 20% of adolescent -- using them intentionally to get high or increase the effects of alcohol or other drugs
  - Prescribed opioid pain medication before high school graduation is associated with a 33% increase in risk of later opioid misuse



# When to Initiate or Continue Opioids for Chronic pain

**#1 Nonpharmacologic therapy and nonopioid pharmacologic therapy are preferred for chronic pain.**

- ✧ Expected benefits for both pain and function are anticipated to outweigh risks to the patient
- ✧ If opioids are used, they should be combined with nonpharmacologic therapy and nonopioid pharmacologic therapy as appropriate.



# Nonpharmacologic therapy

- ✧ Physical therapy
- ✧ Weight loss for knee osteoarthritis
- ✧ Psychological therapies such as CBT
- ✧ Certain interventional procedures
- ✧ Exercise \*\*
- ✧ Combining therapies – psychological therapies with exercise
  - Difficulty with reimbursement



# Nonopioid therapy

- ✧ Acetaminophen – arthritis and low back pain
- ✧ NSAIDs – arthritis and low back pain
- ✧ Antidepressants –
  - Tricyclic antidepressants -- Diabetic neuropathy, post herpetic neuralgia, fibromyalgia
  - SNRIs -- Diabetic neuropathy, post herpetic neuralgia, fibromyalgia
- ✧ Anticonvulsants –
  - Pregabalin diabetic neuropathy and post-herpetic neuralgia; fibromyalgia
  - Gabapentin diabetic neuropathy and post-herpetic neuralgia
  - Carbamazepine – headache



# Integrated pain management

- ✧ Coordination of medical, psychological, social: primary care provider, mental health care, specialists services
- ✧ **Treatment**
  - Nonpharmacologic physical and psychological treatment
    - Exercise and CBT
- ✧ **Barriers**
  - Limited access to care
  - Not always covered by insurance
- ✧ **Facilitators**
  - Low cost options





# Opioids

- ✧ **Not first line**
- ✧ Patients should not be required to “fail” nonpharmacologic and nonopioid treatment before proceeding to opioid therapy
  - Instead approach
    - Benefits should be weighed against risk before initiating therapy
    - Not for headache or fibromyalgia
      - Benefits will not outweigh risks regardless of previous non-opioid therapies
    - Consider for serious illness with poor prognosis
      - Regardless of previous therapies
- ✧ **Use in combination with nonpharmacologic and nonopioid treatment**



# When to Initiate or Continue Opioids for Chronic pain (cont.)

## #2 Before initiating

- Establish treatment goals with all patients, including realistic goals for pain and function
  - Consider how therapy will be discontinued if benefits do not outweigh risks.
- ✧ Clinicians should continue opioid therapy only if there is clinically meaningful improvement in pain and function that outweighs risks to patient safety



# Is it possible to predict benefits vs. risks?

- ✧ Healthcare provider needs “exit strategy” when prescribing opioids.
- ✧ When patient is already on opioid therapy, consider the following:
  - Establish treatment goals for continued opioid therapy
  - Establish expectations regarding prescribing and monitor
  - Define situation where opioids will be discontinued or tapered
  - How long to write prescription for
  - Means of assessing functional goals, depression, anxiety



# When to Initiate or Continue Opioids for Chronic pain (cont.)

## **#3 Before initiating and periodically during opioid therapy**

- Discuss with patients known risks and realistic benefits of opioid therapy**



# Discussion with patients

- ✧ Information about opioids and identified concerns
- ✧ Understand patient preferences, values
- ✧ Patient awareness of benefits and harms and alternatives to opioids
- ✧ Primary goal
- ✧ Adverse effects
- ✧ Side effects



# Discussion with patient (cont.)

- ✧ Operating vehicle
- ✧ Risk for Opioid Use Disorder (OUD), respiratory depression and death
- ✧ Risk to household members (e.g., young children)
- ✧ Safe disposal
- ✧ Periodic reassessment
- ✧ Check PDMP
- ✧ Cognitive limitations



# Opioid Selection, Dosage, Duration, Follow-Up and Discontinuation

- ✧ **#4 Upon initiation for chronic pain, clinicians should prescribe immediate-release opioids instead of extended-release/long-acting (ER/LA) opioids.**



# Schedule of Controlled Substances

| Schedule | Description   | Examples of medications   |
|----------|---|---|
| I        | High potential for abuse; no currently accepted medical use   | Ex: heroin, LSD, cannabis, ecstasy, peyote  |
| II       | High potential for abuse, which may lead to severe psychological or physical dependence                     | Hydromorphone, methadone, meperidine, oxycodone, fentanyl, morphine, opium, codeine, hydrocodone combination products         |
| III      | Potential for abuse, which may lead to moderate or low physical dependence or high psychological dependence | Buprenorphine, benzphetamine, phendimetrazine, ketamine, anabolic steroids, products containing $\leq 90$ mg codeine per dose |
| IV       | Low potential for abuse   | Alprazolam, benzodiazepines, carisoprodol, clonazepam, clorazepate, diazepam, lorazepam, midazolam, temazepam, tramadol       |
| V        | Low potential for abuse   | Gabapentin, pregabalin, cough preparations containing $\leq 200$ mg codeine/100 ml  |





# Initiating opioid therapy

- ✧ Short-acting opioids
  - Lower risk for overdose
- ✧ Extended release/Long-acting opioids
  - High risk for overdose
  - Time schedule ER/LA opioids

## Time schedule ER/LA opioids:

**No evidence these are more effective or more safe than IR**

**No evidence these reduce risk for opioid misuse or OUD**

## Reserved ER/LA opioids:

**Pain severe enough to require daily, ATC, long-term opioids**

**Patient has received IR opioid daily for at least 1 week**

**Nonopioid analgesics or IR opioids not effect, tolerated, or inadequate to manage pain**



# Opioids

- ✧ Breakthrough pain
  - Avoid use of IR opioids in combination with ER/LA opioids
- ✧ Abuse-deterrent technologies
  - Does not deter abuse or overdose through oral intake



# Methadone

- ✧ Not first line
- ✧ Cardiac arrhythmias
- ✧ Complicated pharmacokinetics and pharmacodynamics
- ✧ Long and variable half life



# Transdermal Fentanyl

- ✧ Complex absorption and pharmacodynamics
- ✧ Dosing is often misunderstood
- ✧ Increasing serum concentration during the first part of the 72 hour dosing interval
- ✧ Variable absorption based on factors
  - External heat



# Opioid Selection, Dosage, Duration, Follow-Up and Discontinuation (cont.)

## #5 Start with lowest effective dose

- Reassess evidence of individual benefits and risks with any dose
- When increasing dosage to  $\geq 50$  morphine milligram equivalents (MME)/day reassess risks/benefits
- Avoid increasing dosage to  $\geq 90$  MME/day or carefully justify a decision to titrate dosage to  $\geq 90$  MME/day



# Opioid Selection, Dosage, Duration, Follow-Up and Discontinuation (cont.)

## ✧ Higher opioid doses

### – Risks:

- Motor vehicle injury
- Opioid Use Disorder
- Overdose

## ✧ Risk increases as doses increase

### – Example:

- $\geq 100$  MME/day increased risk of overdose by 8.9 times that of risk of  $< 20$  MME/day



# Know state rules

## ✧ Opioid doses increasing to $\geq 50$ MME/day

“There is now an established body of scientific evidence showing that overdose risk is increased at higher opioid dosages.”

“I will work with you to taper the opioids to safer dosages. The taper can be slow with pauses as needed. You would be working with my team in other ways of managing pain and ways to managing feelings of ‘un-ease’ while we are doing this taper. Please let me know your thoughts and feelings as we do through this. I am here to help you.”

- Increase documentation
  - Justification of diagnosis
  - Document discussions of benefits/risks with patient



- ✧ Effective July 1, 2018
- ✧ High-dose opioids  $\geq$  200 morphine milligram equivalents (MME) per day.
- ✧ MME edit will gradually be decreased over time to 90 MME per day.



Iowa Department of Human Services

Request for Prior Authorization  
LONG-ACTING OPIOIDS

FAX Completed Form To  
1 (800) 574-2515

Provider Help Desk  
1 (877) 776-1567

(PLEASE PRINT – ACCURACY IS IMPORTANT)

|   |                 |       |
|---|-----------------|-------|
| IA Medicaid Member ID #   | Patient name    | DOB   |
| Patient address   |                 |       |
| Provider NPI  | Prescriber name | Phone |
| Prescriber address  |                 | Fax   |
| Pharmacy name   | Address         | Phone |
| Prescriber must complete all information above. It must be legible, correct, and complete or form will be returned. |                 |       |
| Pharmacy NPI  | Pharmacy fax    | NDC   |

Prior authorization (PA) is required for all non-preferred long-acting opioids. PA is also required for members when the total daily opioid dose (combined across all opioids) exceeds the set morphine milligram equivalent (MME) threshold (include High Dose Opioids PA form with request). Payment will be considered under the following conditions: 1) Patient has a diagnosis of chronic pain severe enough to require daily, around-the-clock, long-term opioid treatment; and 2) Patient has tried and failed at least two nonpharmacologic therapies; and 3) Patient has tried and failed at least two nonopioid pharmacologic therapies; and 4) There is documentation of a previous trial and therapy failure with one preferred long-acting opioid at a maximally tolerated dose, and 5) A signed chronic opioid therapy management plan between the prescriber and patient must be included with the prior authorization, and 6) The prescriber must review the patient's use of controlled substances on the Iowa Prescription Monitoring





# Opioid Selection, Dosage, Duration, Follow-Up and Discontinuation (cont.)

**#6 Long-term opioid use often begins with treatment of acute pain.**

- Prescribe the lowest effective dose of immediate-release opioids**
- Prescribe no greater quantity than needed for the expected duration of pain severe enough to require opioids.**



# Acute pain

**Greater risk for long-term use:**

**Greater amounts of opioids at early exposure**

**Emergency departments**

**Each day of unnecessary opioid use increases likelihood of physical dependence without adding benefits**

**Recommendations:**

**ER/LA opioids should not be prescribed for acute pain**

**Less than or equal to 3 days of opioids in most cases, not related to surgery**

**Limiting days should minimize the need to taper opioids to prevent distressing or unpleasant withdrawal**

**3-5 or 3-7 days of opioids**

**No greater than expected need**

**More than 7 days is rarely needed.**



# Opioid Selection, Dosage, Duration, Follow-Up and Discontinuation (cont.)

**#7 Clinicians should evaluate benefits and harms with patient within 1-4 weeks of initiating opioid therapy for chronic pain or of dose escalation.**

- ✧ 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
  - Optimize other therapies and work with patient to taper opioids to lower dosages or to taper and discontinue opioids.



# Evidence

- ✧ Continuing opioid therapy for 3 months increases risk for OUD
- ✧ Reassessment within 1-4 weeks of initiation of long term opioids
- ✧ Risk for OD associated with ER/LA opioids high during 1<sup>st</sup> week of treatment
- ✧ Patient with no pain relief with opioids at 1 month unlikely to experience pain relief with opioids at 6 months



# Evaluation

- ✧ Monitor function, pain control, quality of life
- ✧ **P**ain average, interference with **E**njoyment of life, and interference with **G**eneral activity (PEG) Assessment scale
  - Monitor progress towards functional goals
- ✧ Monitor
  - Constipation
  - Drowsiness



# Ongoing evaluation

- ✧ Long-term opioid therapy
  - Warning signs of serious adverse events (OUD)
    - Difficulty controlling use
    - Difficulty with work or family
    - Difficulties related to opioid use
- ✧ Monitor at least every 3 months



# Mental Health

- ✧ Risk for OUD
  - Depression, Anxiety
  - History of substance use disorder
  - History of overdose
  - Taking  $\geq 50$  MME/day
  - Taking other CNS depressants with opioids
- ✧ Follow up **more frequently than every 3 months**
- ✧ Work with patient to **reduce opioid dosage and discontinue** when possible
- ✧ **Maximize nonpharmacologic and nonopioid pharmacologic treatments**
- ✧ Consult as needed



# Taper of opioids

- ✧ No high quality studies to guide recommendations
- ✧ Expert opinion
  - Taper weekly dosage by 10-50% of original dose
  - Rapid taper over 2-3 weeks
    - for sever AE such as overdose
  - Slower tapering may be more tolerated
    - Less than 10% per week or 10% per month
    - Used for non-urgent taper when patient's have been taking opioids for long periods (years)





# Taper protocol example (slow)

- ✧ 10% decrease of the original dose per week
- ✧ May need to pause and restart again
- ✧ Once patient reaches low dosages, may need to slow down taper
  - Extend the interval between dose
  - Stop opioids when patient is taking less frequently than once a day
- ✧ Withdrawal symptoms
  - Drug craving, anxiety, insomnia, abdominal pain, vomiting, diarrhea, diaphoresis, mydriasis, tremor, tachycardia, or piloerection



# Taper protocol (rapid)

- ✧ Used for patient safety such as overdose
- ✧ Ultra-rapid detoxification under anesthesia
  - Substantial risk
  - Should NOT be used



# Treatment Plan

## ✧ Educate patient

- Increased risk of overdose if they return to a previously higher dose
- Optimize nonopioid pain management
- Optimize psychosocial support for anxiety
- May need to arrange for treatment of OUD
- Offer naloxone



# Assessing Risks and Addressing Harms of Opioid Use

**#8 Before starting and periodically during continuation of opioid therapy, clinicians should evaluate risk factors for opioid-related harms.**

- ✧ Incorporate into management plan, strategies to mitigate risk
  - Consider offering naloxone when factors that increase risk for opioid overdose exists
    - Examples:
      - History of overdose
      - History of SUD
      - Higher opioid dosages ( $\geq 50$  MME/day)
      - Concurrent benzodiazepine use



# Assessing Risk Factors Co-morbidities

- ✧ Frequency depends on patient characteristics and varying risk
- ✧ Offer naloxone
- ✧ Risk factors are
  - Sleep-disorder
  - Pregnancy
  - Renal or hepatic insufficiency
  - Age over 65 years
  - Mental Health conditions
  - Substance Use Disorder
  - Previous nonfatal overdose



# Sleep Disordered Breathing

- ✧ Includes sleep apnea
- ✧ Risk factors for this are CHF and obesity
- ✧ **When mild**
  - Use caution with dose titration
- ✧ **When moderate or severe**
  - Avoid prescribing opioids
  - Minimize risks for opioid overdose



# Pregnancy

## ✧ Opioid use in pregnancy risks

- stillbirth
- poor fetal growth
- pre-term delivery
- birth defects
- Neonatal opioid withdrawal syndrome
  - Neonatal abstinence syndrome (NAS)

## ✧ Withdrawal during pregnancy associated with spontaneous abortion and premature labor



# Pregnancy (cont.)

- ✧ Before initiating opioid therapy – **women in childbearing years**
  - Family planning
  - Long-term opioid use affect on future pregnancy
- ✧ Pregnant women receiving opioids for pain
  - Appropriate expertise for taper
    - Do not do this yourself
- ✧ Pregnant women with Opioid Use Disorder
  - Buprenorphine
  - Methadone
- ✧ Arrange for delivery at a facility prepared to monitor, evaluate for, and treat neonatal opioid withdrawal syndrome





# Breast feeding

- ✧ Neonatal toxicity and death

- Mothers taking codeine

- ✧ Avoid codeine

- If used, should be limited to lowest possible dose and a 4-day supply



# Renal or Hepatic insufficiency -- Toxicity

- ✧ Decreased ability to metabolize and excrete drugs
- ✧ Susceptible to accumulation of opioids
- ✧ Reduced therapeutic window between safe doses and respiratory depression
- ✧ Increased risk for overdose



# Greater than 65 years old

- ✧ Increased risk with opioids and non-opioids
  - Reduced renal function – even in absence of renal disease
  - Reduced clearance of medication
  - Accumulation
    - Smaller therapeutic window
- ✧ Cognitive impairment
  - Medication errors
  - Opioid-related confusion
- ✧ Multiple medications
  - Interaction
- ✧ Falls risk
- ✧ Caregiver



# Mental Health conditions

- ✧ Interferes with improvement of pain and function
- ✧ Assessment tools
  - Generalized Anxiety Disorder (GAD-7)
  - Patient Health Questionnaire (PHQ-9 or PHQ-4)
- ✧ Increased risk for Opioid Use Disorder
  - Depression
  - Anxiety
  - PTSD
- ✧ Do not initiate Opioids
  - Psychiatric instability or uncontrolled suicide risk
  - History of suicide attempt or psychiatric disorder



# Mental Health conditions (cont.)

- ✧ Optimize treatment for mental health condition
- ✧ Consult with behavioral health specialists
- ✧ Chronic pain and depression
  - Consider Tricyclic antidepressants or SNRI



# Substance Use Disorder

- ✧ Death certificates
- ✧ Screening tools
- ✧ Single screening question
  - “How many times in the past year have you used an illegal drug or used a prescription medication for nonmedical reasons?”
    - In primary care, this question had 100% sensitivity, 73.5% specificity for detection of substance use disorder.
- ✧ Tools
  - Drug Abuse Screening Test (DAST)
  - Alcohol Use Disorders Identification Test (AUDIT)
  - Prescription Drug Monitoring Program (PDMP)
- ✧ Naloxone – <https://prescribetoprevent.org>



# Prior Nonfatal Overdose

**Substantial increase risk for future nonfatal or fatal opioid overdose**

**Discuss increased risk for overdose with patient**

**Reduce opioid dose**

**Discontinue opioids when possible**

**Naloxone**

**Increase frequency of monitor**



# Assessing Risks and Addressing Harms of Opioid Use (cont.)

**#9 Review the patient's history of controlled substance prescriptions using state prescription drug monitoring program (PDMP) data to determine whether**

- Patient is receiving opioid doses that create high risk for overdose**
- Patient is receiving dangerous combinations that create high risk for overdose**





# Prescription Monitoring Program (PMP)

- ✧ Indian Health Care Delivery
- ✧ Veterans Administration
- ✧ Methadone Clinics
- ✧ Useful tool
  - Experts disagree about frequency of checking PMP
  - Most agree every 3 months or more frequently for long term opioid therapy
  - Ideally with every prescription



# Prescription Monitoring Program – Iowa

← Back

DEPARTMENT OF HEALTH  
Powered by NarxCare™

Error Correction

Rx Maintenance

New Rx

PharmacyRx

## PharmacyRx

Report Prepared: 10/16/2017

Date Range: 09/01/2017 – 10/13/2017



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– title

Street Address      City      State      Zip

### Report Criteria

Identifier Number

PH1111119

– Dispensations

| Fill Date  | Rx #  | Name          | Year of Birth | Drug Name                      | Qty  | Supply | Refill Number | Prescriber Name   | Pymt Type |
|------------|-------|---------------|---------------|--------------------------------|------|--------|---------------|-------------------|-----------|
| 10/13/2017 | 54555 | PATIENT, TEST | 1945          | HYDROCODON-ACETAMINOPHEN 5-325 | 5.0  | 5      | 0             | DR, DOCTOR        | paid      |
| 10/13/2017 | 54321 | PATIENT, TEST | 1945          | HYDROCODON-ACETAMINOPHEN 5-325 | 10.0 | 10     | 0             | TEST, DOCTOR      | paid      |
| 10/12/2017 | 86329 | PATIENT, TEST | 1945          | HYDROCODON-ACETAMINOPHEN 5-325 | 10.0 | 10     | 0             | ANOTHER, DOCTOR   | paid      |
| 10/12/2017 | 54321 | PATIENT, TEST | 1945          | HYDROCODON-ACETAMINOPHEN 5-325 | 10.0 | 10     | 0             | ANOTHER, DOCTOR   | paid      |
| 10/12/2017 | 78541 | PATIENT, TEST | 1945          | HYDROCODON-ACETAMINOPHEN 5-325 | 10.0 | 10     | 0             | DIFFERENT, DOCTOR | paid      |
| 10/12/2017 | 09645 | PATIENT, TEST | 1945          | HYDROCODON-ACETAMINOPHEN 5-325 | 15.0 | 15     | 0             | THE, DOCTOR       | paid      |
| 10/11/2017 | 45216 | PATIENT, TEST | 1945          | HYDROCODON-ACETAMINOPHEN 5-325 | 30.0 | 30     | 0             | THE, DOCTOR       | paid      |
| 10/11/2017 | 12345 | PATIENT, TEST | 1945          | HYDROCODON-ACETAMINOPHEN 5-325 | 30.0 | 30     | 0             | JORDAN, DOCTOR    | paid      |



# Using the PMP

**Discuss information with patient and confirm**  
**Discuss safety concerns with patient with other healthcare providers**  
**Avoid prescribing opioids and benzodiazepines**

**Calculate total MME/day – taper if needed**  
**Consider possible SUD and discuss with patient**  
**Urine toxicology screen**  
**Sharing**  
**Not taking (consider false negative)**  
**Do not dismiss patient from care**



# Assessing Risks and Addressing Harms of Opioid Use (cont.)

**#10 Clinicians should use urine drug testing before starting opioid therapy**

- Consider urine drug testing at least annually to assess for prescribed medication and controlled prescription drugs and illicit drugs**



# Urine drug testing (UDT)

- ✧ NOT accurate information about how much or what dose
- ✧ No studies -- UDT to mitigate risk during opioid prescribing for pain
- ✧ Misinterpretation
  - Harm
  - Stigmatizing
  - Inappropriate termination from care
- ✧ Experts: Truly random UDT was not feasible in clinical practice
- ✧ Not covered by insurance
- ✧ Clinical interpretation takes time.



# UDT (cont.)

- ✧ Prior to starting opioids
  - Perform UDT – look for prescribed opioids and illicit drugs
  - Difference in opinion of Experts on frequency
- ✧ Tetrahydrocannabinol (THC)
- ✧ Interpretation of metabolites
  - Toxicology variability



# Urine toxicology

Nagpal, G., Heiman, H., Haymond, S., (2017). Interpretation of urine drug screens: metabolites and impurities. JAMA 318, 17, 1705

| Interfering drug  | Immunoassay affected* |
|---|-----------------------|
| Quinolone antibiotics (eg, levofloxacin, ofloxacin)       | Opiates               |
| Antidepressant trazodone                                  | Fentanyl              |
| Antidepressant trazodone                                  | Ecstasy               |
| Antidepressant venlafaxine                                | Phencyclidine         |
| Antidepressant bupropion                                  | Amphetamine           |
| Atypical antipsychotic quetiapine                         | Methadone             |
| Antiretroviral efavirenz                                  | THC                   |
| Diet pills (eg, clobenzorex, fenproporex)                 | Amphetamine           |
| Promethazine (for allergies, agitation, nausea, vomiting) | Amphetamine           |
| l-methamphetamine (over-the-counter nasal inhaler)        | Amphetamine           |
| Dextromethorphan  | Phencyclidine         |
| Tramadol  | Phencyclidine         |
| Proton pump inhibitors (such as pantoprazole)             | THC                   |



# What to do with unexpected results -- UDT

**Change in pain  
management  
strategy**

**Tapering**

**Discontinuation**

**More frequent re-  
evaluation**

**Offer naloxone**

**Do not dismiss patient  
from care**

**Adverse consequences**

**Abandonment**

**Safety**

**Alternative sources**

**Missed opportunity to  
facilitate treatment**





# Assessing Risks and Addressing Harms of Opioid Use (cont.)

- ✧ **#11 Avoid prescribing opioid pain medication and benzodiazepines concurrently whenever possible.**



# Opioid and Benzodiazepines

- ✧ Greater risk for fatal overdose
- ✧ Epidemiology studies
  - Benzodiazepine and opioid prescription nearly quadrupled risk for overdose compared with opioid prescription alone.
- ✧ Experts
  - Circumstances where it is appropriate
    - Severe acute pain in patients taking long term stable low dose benzodiazepine therapy
  - **Avoid prescribing opioids and benzodiazepines concurrently whenever possible**



# Benzodiazepine taper

- ✧ Consult with pharmacists and/or pain specialist
- ✧ Withdrawal: Rebound anxiety, Hallucinations, Seizures, Delirium tremens
  - Rare cases – death
- ✧ Common taper schedule with moderate success
  - Reduce dose by 25% every 1-2 weeks
- ✧ Cognitive Behavioral Therapy increases success rates with taper
- ✧ Specific anti-depressants or nonbenzodiazepine medications for anxiety
- ✧ Consult Mental health professional



# Assessing Risks and Addressing Harms of Opioid Use (cont.)

- ✧ **#12 Offer or arrange evidence-based treatment (usually medication for opioid use disorder with buprenorphine or methadone in combination with behavioral therapies) for patients with opioid use disorder.**



# Opioid Use Disorder (OUD)

- ✧ **Problematic pattern of opioid use leading to clinically significant impairment or distress, manifested by at least two defined criteria occurring within a year (DSM-5)**



# DSM-5 checklist

[https://www.asam.org/docs/default-source/education-docs/dsm-5-dx-oud-8-28-2017.pdf?sfvrsn=70540c2\\_2](https://www.asam.org/docs/default-source/education-docs/dsm-5-dx-oud-8-28-2017.pdf?sfvrsn=70540c2_2)

## DSM-5 Criteria for Diagnosis of Opioid Use Disorder

### Diagnostic Criteria\*

These criteria not considered to be met for those individuals taking opioids solely under appropriate medical supervision.

Check all that apply

|  |   |
|--|---|
|  | Opioids are often taken in larger amounts or over a longer period of time than intended.  |
|  | There is a persistent desire or unsuccessful efforts to cut down or control opioid use.   |
|  | A great deal of time is spent in activities necessary to obtain the opioid, use the opioid, or recover from its effects.                      |
|  | Craving, or a strong desire to use opioids.   |
|  | Recurrent opioid use resulting in failure to fulfill major role obligations at work, school or home.  |
|  | Continued opioid use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of opioids. |



# Future directions

- ✧ CDC will re-visit these guidelines as new evidence becomes apparent
- ✧ Research opportunities have been identified here
- ✧ Since these guidelines, a tool with high sensitivity, high specificity, and good prediction for development of Opioid Use Disorder has been identified.





# Questions