# Pain Medicine

# Have Opioids Outlived Their Usefulness for Chronic Pain

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I have no financial conflicts of interest.

# **OBJECTIVES**

- RISKS AND BENEFITS OF OPIOID THERAPY
- STANDARD OF CARE FOR OPIOIDS
- OUTCOMES OF OPIOID THERAPY IN CHRONIC BENIGN PAIN PATIENTS

- Use dates back centuries (Opium) 3000 BC
- Modern use for Pain
  - Morphine 1806
    - used in Civil War; Soldiers Disease
  - Heroin 1898 synthesized from Morphine
    - Meant to be a Non-addictive Substitute for Morphine
  - 1950 Oxycodone
  - 1970 Controlled Substance Act (Schedule I-V)
  - 1978 Hydrocodone
- Categories
  - Opium Alkaloids (Morphine, Codeine)
  - Semisynthetic (Oxycodone, Hydrocodone)
  - Synthetic (Fentanyl, Methadone)

Mu<sub>1</sub>: Euphoria, Supraspinal Analgesia, Confusion, Dizziness, Nausea, Low Addition Potential

Mu<sub>2</sub> Respiratory Depression, Cardiovascular and GI Effects (Naloxegol), Miosis, Urinary Retention

Delta: Spinal Analgesia, Cardiovascular Depression, Decreased Brain and Myocardial Oxygen Demand

Kappa: Spinal Analgesia, Dysphoria, Psychomimetic Effects, Feedback Inhibition of Endorphin System

# **TYPES**

- SHORT-ACTING (SA)
   ORAL TYPICALLY 30MIN ONSET LASTING 4-6 HOURS
   SUBLINGUAL RAPID ONSET LASTING 2-4 HOURS
   SHORT ½ LIFE
- LONG-ACTING (LA)
   ORAL 8-24 HOURS; BUCCAL 12 HOURS
   TRANSCUTANEOUS 72 HOURS -7 DAYS
   LONGER ½ LIFE WITH PROLONGED ELIMINATION
   SUSTAINED RELIEF ONCE AT STEADY STATE
- ABUSE DETERRANT
   FORMS GEL, MATRIX, NALTRXONE/NALOXONE

# SIDE EFFECTS

- ALTERED MENTAL STATUS / SEDATION
- NAUSEA
- URINE RETENTION
- ITCHING
- CONSTIPATION, CONSTIPATION, CONSTIPATION

## **COMPLICATIONS**

- RESPIRATORY SUPPRESSION (DEATH)
- ADDICTION vs. DEPENDANCE
- HORMONAL DYSFUNCTION
  - DECREASED LIBIDO, MOOD DO, OSTEOPOROSIS
- DELAYED GASTRIC EMPTYING
- DYSTONIC REACTIONS
- CARDIAC (PROLONGED QT INTERVAL)
- SLEEP DISORDER
- HYPERALGESIA

### **INDICATIONS**

### ACUTE

- TRAUMA (BURNS, FRACTURES, LACERATIONS)
- OPERATIONS
- KIDNEY STONES, GALLSTONES, MI, ETC...

# CHRONIC

- BENIGN PAIN
- CANCER PAIN (MOSTLY TERMINAL)
- LA OPIOIDS
- SA OPIOIDS (BREAKTHROUGH PAIN)

# INDICATIONS FOR CHRONIC BENIGN PAIN

- MILD, MODERATE, SEVERE PAIN
- LACK OF ADEQUATE MEDICAL SCIENCE
  - NO LARGE MULTICENTER RCT
  - PRESCRIBING OPIOIDS 30 PLUS YEARS
  - MILLIONS OF PATIENTS
  - BILLIONS OF DOLLARS
- ANCEDOTAL EVIDENCE
- NO DOCUMENTED FUNCTIONAL IMPROVEMENT
- VAS 0-10
- BAD OUTCOMES

# WHO 3-Step Ladder

3 severe

2 moderate

1 mild

Aspirin

Acetaminophen

NSAIDs:

± Adjuvants

APAP / codeine

APAP / hydrocodone

APAP / oxycodone

APAP / dihydrocodeine

Tramadol

± Adjuvants

Morphine

Hydromorphone

Methadone

Leverphanel

Fentanyl

Oxycodone

Adjuvants

World Health Organization. Cancer Pain Relief, with a Guide to Opioid Availability. 1996.

- USA 80% OF THE WORLDS OPIOIDS
- USA REPRESENT 5% OF WORLD POPULATION
- USA CONSUMES 99% OF HYDROCODONE
- 300 MILLION OPIOID PRESCRIPTIONS 2015
- \$24 BILLION

**CNBC: DINA GUSOVSKY** 

### **HYDROCODONE**

- MOST COMMON OPIOID UNTIL 2014
- CHANGED TO SCHEDULE II IN OCTOBER 2014
- DECREASED 34% SINCE 2012
- REPORTS ATTRIBUTE TO OPIOID EPIDEMIC
- CONTROLS PLACED ON OPIOIDS
  - CAN NO LONGER CALL INTO PHARMACY
  - UPSURGE IN TRAMADOL PRESCRIPTIONS

# **CONTROLLED SUBSTANCE ACT (1970)**

- SCHEDULE I: HIGH ABUSE POTENTIAL, NO MEDICAL USE LSD, HEROIN, MARIJUANA (EXTRACT?), ECSTASY
- SCHEDULE II: HIGH ABUSE POTENTIAL, SEVERE DEPENDENCE MORPHINE, OXYCODONE, HYDROCODONE, FENTANYL, METHADONE, OPIUM, AMPHETAMINES
- SCHEDULE III: HIGH ABUSE POTENTIAL, LOW-MOD DEPENDENCE BUTRANS, SUBOXONE, CODEINE <90MG, KETAMINE
- SCHEDULE IV: LOWER ABUSE POTENTIAL
  TRAMADOL, SOMA, BENZODIAZEPINES
- SCHEDULE V: LOWEST ABUSE POTENTIAL LYRICA, CODEINE 200MG

# FEDERAL LAWS

**SCHEDULE II** 

**NO REFILLS** 

90 SUPPLY (2007); MULTIPLE PRESCRIPTIONS ALLOWED

PRESCRIPTIONS MUST HAVE REFILL TIME OR DATE

NO TIME LIMIT (expiration)

NO POSTDATED PRESCRIPTIONS

NO PILL LIMIT

FAX: LTCF, HOSPICE, DIRECTLY INTO PATIENT

SCHEDULE III, IV, V

MAY ISSUE FOR 6 MONTHS; ORIGINAL PLUS 5 REFILLS

WRITTEN EAVED CALLED

### **SOUTH CAROLINA LAW**

PRACTITIONER MUST REGISTER WITH DHEC
UTILIZE SCRIPTS
VALID PRACTITIONER-PATIENT RELATIONSHIP
LEGITIMATE MEDICAL PURPOSE
REQUIRES GOVERNMENT-ISSUED ID
PRESCRIBING TO FAMILY MEMBERS IS A VERY BAD IDEA
SCHEDULE II

**NO REFILLS** 

MAY NOT EXCEED 31 DAY SUPPLY; EXCEPT PATCHES

PRESCRIPTION VALID FOR 90 DAYS

FAX FOR LTCF, HOSPICE, DIRECTLY INTO PATIENT (INTRATHECAL, IV)

SCHEDULE III, IV, V

WRITTEN, FAXED, CALLED

**REFILLED 5 TIMES IN 6 MONTH PERIOD** 

PRESCRIPTION VALID 6 MONTHS

MAY NOT EXCEED 90 DAY SUPPLY

# Improvement Activities for Medicare

- STATE Prescription Drug Monitoring Program
- Not Federal Program
- State Level
  - Annual registration by eligible clinician or group in the prescription drug monitoring program of the state where they practice. Activities that simply involve registration are not sufficient. MIPS (MERIT BASED) eligible clinicians and groups must participate for a minimum of 6 months.

# **OPIOIDS**

- TMTC articles in the Medical Journals on complications, lack of objective benefit and legal issues
- Resurgence of Heroin and new synthetic Fentanyl
- Opioid Epidemic????
- Big Pharma pushing opioid prescriptions
  - **-** \$\$,\$\$\$,\$\$\$,\$\$\$
- Pain Physicians being sued for overdose deaths
  - WHAT IS THE STANDARD OF CARE? (Legal Term)

# OPIOID EPIDEMIC

- MEDIA (FOX NEWS COVERAGE)
- FEDERAL AND STATE GOVERNMENT INVESTIGATING
- GOVERNOR CHRISTIE LEADING FEDERAL TASK FORCE
- ATTACKING
  - PHARMACEUTICAL MANUFACTURERS
  - DISTRIBUTORS (CARDINAL, MCKESSON)
  - PHARMACIES (CVS, WALGREENS)
- WHO IS MISSING FROM THIS PROBLEM?

# PHYSICIANS

- NO SHORTAGE OF PATIENTS
  - WAITING ROOMS LOOK LIKE METHADONE CLINIC
- GREAT SOURCE OF INCOME
- MONTHLY APPOINTMENTS
  - NP OR PA SEES PATIENTS
  - COPY AND PASTE NOTES
- FREQUENT URINE DRUG SCREENING
  - GOOD DOCTOR VS. GREEDY DOCTOR???
  - \$200-\$2000 PER UDS
  - RANDOM UDS EVERY 4-6 MONTHS & PRN
  - INSURANCE CONTRACT WITH OUTSIDE LAB

# WHAT'S BEING DONE?

- NOT MUCH ABOUT PHYSICIANS
  - PAIN PRACTICES LOCAL, STATE, NATIONAL
  - UDS IS MAJOR SOURCE OF INCOME
  - LEGITIMATE MEDICAL NEED FOR OPIOIDS?
- NOBODY REALLY CARES?
  - STATE MEDICAL BOARDS (EXTREME CASES)
  - GOVERNMENT (BIG PHARMA LOBBYING)
  - MEDIA (GREAT STORY LAST WEEK)
- TOO MANY PLAYERS IN THIS GAME
- SOUTH CAROLINA GOVERNOR'S TASK FORCE
  - 2 HOUR CME EVERY 2 YEARS
  - UTILIZE SCRIPTS

- SCRIPTS
  - Georgia and Tennessee participate
  - No Reciprocal Relationship with North Carolina
  - Able to search back 4 years
- E-scripts to minimize illegal prescriptions
- Dosing 80-120 mg/day MED recommendation
  - MORPHINE IS THE STANDARD
  - CONVERT OTHER OPIOIDS TO DOSING EQUIVALENTS
  - FENTANYL IS THE EXCEPTION
  - HIGH DOSES LEAD TO HYPERALGESIA
- DEA, CDC, FDA, DHEC, State Medical Boards...

# Washington State WC

- Specific criteria for prescribing opioids
- Expected outcomes (30% relief above baseline)
- Functional improvement (Work Conditioning or Vocational Rehabilitation)
- Monitoring
- Application Forms
   Clinically Meaningful Improvement in Function (CMIF)

Department of Labor and Industries PO Box 44291 Olympia WA 98504-4291

#### **CHRONIC OPIOID REQUEST FORM**

Billing code 1078M

#### Opioids.Lni.wa.gov

Worker's name	Clair	m number _			
Has the worker's opioid dose increased since last at	uthorization?	☐ Yes	□ No		
Opioids must result in clinically meaningful improver sustained CMIF during chronic phase. This means response to a dose change.					
Function assessment					
Current pain interference — This scale's examples of a the last month, how much has pain interfered with the 0 — <b>No interference</b> . Goes to work each day, has a soci 1 — Can work/volunteer, be active eight hours daily, take 2 — Can work/volunteer for at least six hours daily, has e week, is active on the weekends.  3 — Can work/volunteer for a few hours daily, is active at 4 — Can work/volunteer limited hours, has limited social 5 — Not able to work/volunteer, struggles with home resp 6 — Does simple chores around home, has minimal outs 7 — Gets dressed in the morning, has minimal activities a 8 — Gets out of bed but doesn't get dressed, stays at hor 9 — Stays in bed at least half the day, has no contact with 10 — <b>Unable to carry out any activities</b> . Stays in bed at Date of first function assessment or before a dose change if an alternative function scale is used, indicate name of s	worker's daily a ial life outside of spart in family listered by the least five hours activities on wee consibilities and dide activities two at home, has corme all day, he he outside woll day, feels help e (baseline):	ctivities and work, takes a fe, has limited lans for one of daily, does sikends. Outside activit days a week tact with frier rld. less and hope	functions? Circl in active part in f d outside social a evening social ac mple activities o ies	e number. ramily life. activities. ctivity durin n the week email.	g the cends.
	<u> </u>			OII	
<b>Screening</b> For free, easy to use, and validated screening tools and opioid of	calculator visit ww	w agencymed	directors wa gov/o	nioiddosina	aen
Have you documented in the medical records the follow		w.ageneymeat	aireotoro.wa.gov/o	pioladoonig.	uop.
Tried to manage the worker's pain with non-opioids?	g			Yes 🗌	No 🗌
<ol><li>Re-administered urine drug tests at frequency based o of recurrent aberrant behaviors (e.g.presence of cocaine, alcohol or non-prescribed drug; negative for prescribed o monitor.</li></ol>	amphetamine/n	nethamphetar	nine, heroin,	Yes 🗌	No 🗌
3. Re-checked the state's prescription monitoring prograr worker has no pattern of recurrent aberrant behaviors (e. multiple early refills, unauthorized dose escalation)? See	g. lost prescription	ons, multiple p	orescribers,	Yes 🗌	No 🗌
4. Signed a treatment agreement for chronic opioid therapy with the worker? Treatment agreement should be renewed yearly.					No 🗌
So. Re-assessed for potential contraindications to the use of opioids (e.g. substance use disorder Yes No excluding nicotine; history of opioid use disorder; confirmed presence of cocaine, heroin, alcohol, or amphetamine/methamphetamine)?					
6. Verified the worker has no known evidence of or is not at high risk for serious adverse outcome from opioid use (e.g. COPD, asthma, sleep apnea, apparent intoxication)?				Yes 🗌	No 🗌
7. Obtained a pain management consult if opioid dose >1 If consultation is exempted, explain in the medical record	20mg/d morphin		dose (MED)?	Yes 🗌	No 🗌
Dose					
Current opioid	Dose (MEI	D mg/d)			
Current opioid	Dose (MEI				
	Total MED				
Sign					
Provider name	L&I provider number	er/NPI	Phone number		
Provider signature	Date		1		

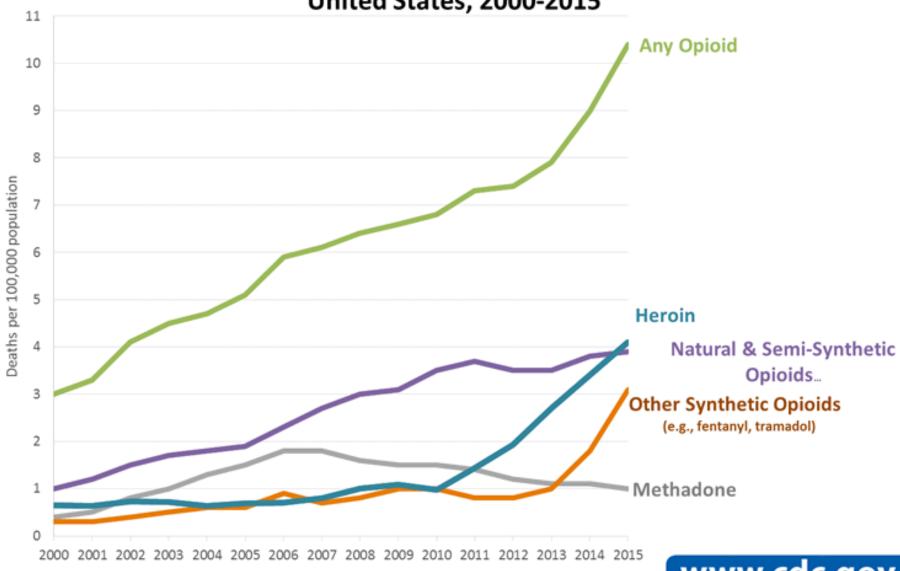
### **WORKERS COMPENSATION**

- PHYSICIANS DISPENSING OUT OF OFFICE
- NOT USUALLY OPIOIDS
  - PAPERWORK / BUREAUCRACY
  - SECURITY
  - LEGAL ISSUES
- A LOT OF ADJUVANT MEDICATIONS
  - SLEEPING PILLS
  - BENZODIAZEPINES (ASSOCIATE W/ 30% OF ALL ODs)
  - MUSCLE RELAXANTS / ANTICONVULSANTS
  - NSAIDS
  - VITAMINS/FOOD SUPPLEMENTS
  - MOSTLY CNS DEPRESSANTS
- COSTLY TO INSURANCE COMPANIES
  - STOP ALLOWING DISPENSING IN OFFICE
  - DISPENSING PAYS PHYSICIAN WELL

# In Office Prescriptions

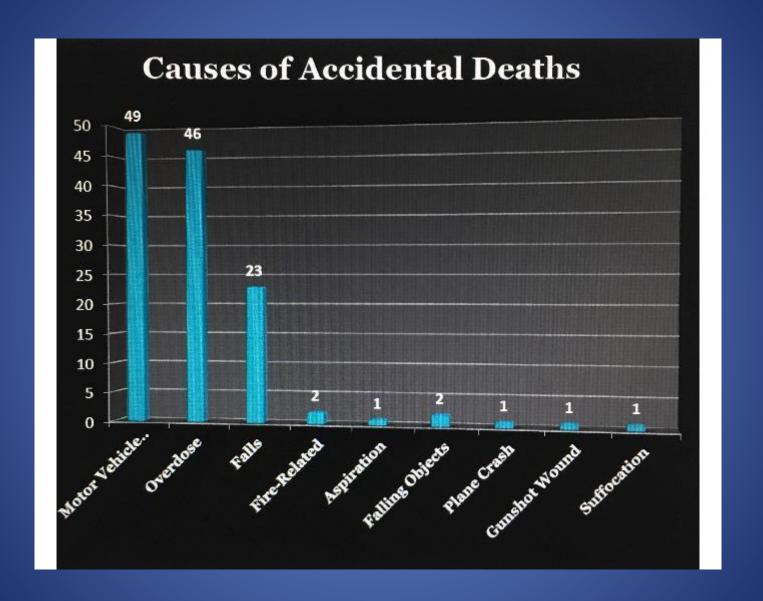
- Incentive to prescribe the highest reimbursed drug (SOMA)
- Alternative doses not available in the retail pharmacy (Ultram ER 150mg)
- Inexpensive OTC meds combined for higher cost (Capsaicin/Lidocaine/Menthol)
- Supplements (Theramine, Percura, Sentra...)
  - Limited and poor studies by the manufacturers
  - Only available in the physician's office?
  - FDA approved (Safety)

### Overdose Deaths Involving Opioids, by Type of Opioid, United States, 2000-2015



SOURCE: CDC/NCHS, National Vital Statistics System, Mortality. CDC WONDER, Atlanta, GA: US Department of Health and Human Services, CDC; 2016. https://wonder.cdc.gov/.







### **Prescription Opioid Overdose Data**

Overdose deaths involving prescription opioids have quadrupled since 1999,<sup>1,2</sup> and so have sales of these prescription drugs.<sup>3</sup> From 1999 to 2015, more than 183,000 people have died in the U.S. from overdoses related to prescription opioids.<sup>1,2</sup>

#### Overdose Data

Opioid prescribing continues to fuel the epidemic. Today, nearly half of all U.S. opioid overdose deaths involve a prescription opioid. In 2015, more than 15,000 people died from overdoses involving prescription opioids.

### **Most Commonly Overdosed Opioids**

The most common drugs involved in prescription opioid overdose deaths include:

- Methadone
- Oxycodone (such as OxyContin®)
- Hydrocodone (such as Vicodin®)<sup>4</sup>

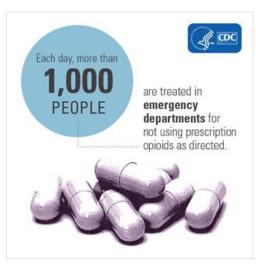
#### Overdose Deaths

Among those who died from prescription opioid overdose between 1999 and 2014:

- Overdose rates were highest among people aged 25 to 54 years.
- Overdose rates were higher among non-Hispanic whites and American Indian or Alaskan Natives, compared to non-Hispanic blacks and Hispanics.
- Men were more likely to die from overdose, but the mortality gap between men and women is closing.<sup>5</sup>

#### **Additional Risks**

Overdose is not the only risk related to prescription opioids. Misuse, abuse, and opioid use disorder (addiction) are also potential dangers.



# CDC OPIOID PRESCRIBING GUIDELINE MOBILE APP



### Safer Opioid Prescribing at Your Fingertips

### THE OPIOID GUIDELINE APP

Opioids can have serious risks and side effects, and CDC developed the CDC Guideline for Prescribing Opioids for Chronic Pain to encourage safer, more effective chronic pain management. CDC's new Opioid Guideline App makes it easier to apply the recommendations into clinical practice by putting the entire guideline, tools, and resources in the palm of your hand.



Since 1999, the amount of prescription opioids sold in the U.S. has nearly quadrupled.

#### **FEATURES INCLUDE:**



Patients prescribed higher opioid dosages are at higher risk of overdose death. Use the app to quickly calculate the total daily opioid dose (MME) to identify patients who may need closer monitoring, tapering, or other measures to reduce risk.



Access summaries of key recommendations or link to the full Guideline to make informed clinical decisions and protect your patients.



To provide safer, more effective pain management, talk to your patients about the risks and benefits of opioids and work together towards treatment goals. Use the interactive MI feature to practice effective communication skills and prescribe with confidence.

MANAGING CHRONIC PAIN IS COMPLEX, BUT ACCESSING PRESCRIBING GUIDANCE HAS NEVER BEEN EASIER.

Download the free Opioid Guideline App today! https://www.cdc.gov/drugoverdose/ prescribing/app.html.







This App, including the calculator, is not intended to replace clinical judgment. Always consider the individual clinical circumstances of each patient.

# RECENT CASE TO REVIEW

- Chronic Back and Leg pain (WC)
- Prior Lumbar Fusion
- Morphine SR 100 mg TID with Percocet 10 mg BID
- Neurontin, Ambien, Klonopin, Zanaflex, Mobic, Antidepressants, Food Supplements, Topicals
- VAS 5-7/10
- Permanent SCS (3 trials)
- Same Meds and VAS, No Functional Benefit after SCS
- No Improvement at a cost of +/- \$60-80K for SCS

# THANK YOU