



Best Practices in Opioid Management

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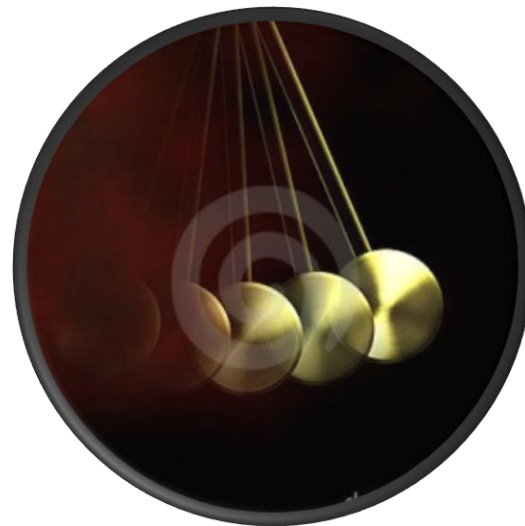
November 5, 2020



Goals

- › Discuss ethical concepts pertaining to pain
- › Define types of pain
- › Review the medical and legal history of narcotics
- › Describe components of pain management program
- › Analyze current opioid treatment guidelines

Primum Non Nocere



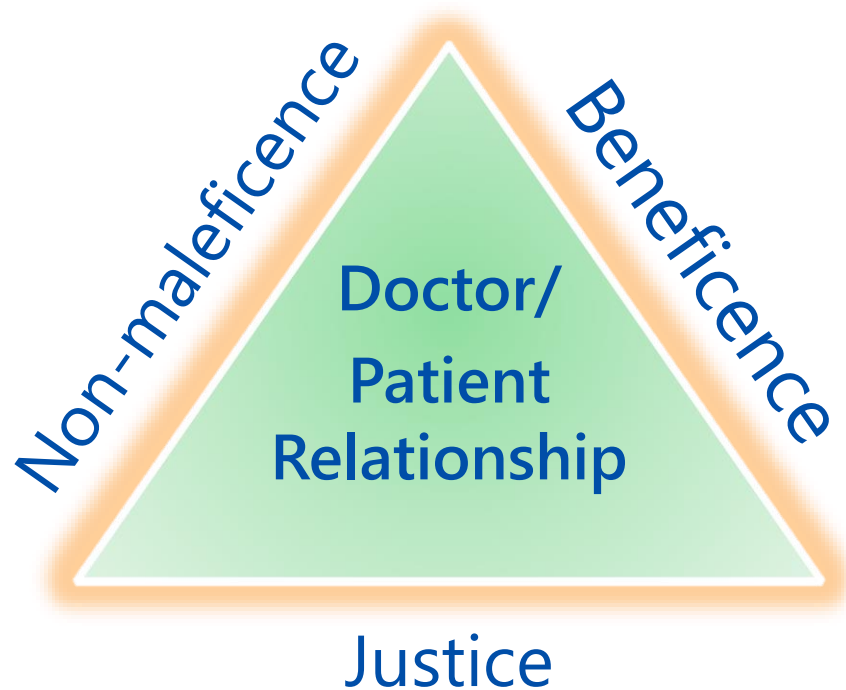


Bioethical Principals

- › Autonomy – Respecting the privacy and self-determination of the individual
- › Beneficence – Providing benefit
- › Non-maleficence – Avoiding harm
- › Justice – Fairly distributing the risk, burdens, and benefits.

Non-maleficence vs. Beneficence







Autonomous informed consent requires:

- › Understanding of information & consequences
- › Demonstration of insight
- › Reason and judgement
- › Ability to decide
- › Voluntariness



Physician Responsibilities

- › Holistic Treatment
- › Competence & Compassion
- › Education
- › Research
- › Advocate



“Painful” Statistics

- › 1 in 3 Americans suffer
- › Yearly costs exceed ½ trillion dollars
- › Most common cause of long-term disability
- › Effects nearly 40% of the world’s population
- › Primary reason to see a physician.



Facts

- › U.S. makes up 4.6% of the worlds population but uses
 - 50% of the manufactures drugs
 - 67% of the worlds illegal drugs
 - 80% of global opioids
 - 99% of global hydrocodone
 - (Manchikanti L., Singh A. Pain Physician, 2008, 11, S63)
- › Consumes almost 30% of global oil supply
- › Produces 80% of Lawyers



Facts

- › 600 million suffer negative health effects of untreated pain
- › 5.5 billion live in countries with little or no access to opioids
 - (King et al, Am Jr Public Health, 2014, June)
- › At least 116 million American adults have common chronic pain conditions, but only 3,488 physicians were board certified in pain care between 2000 and 2009; thus there are more than 33,000 people with chronic pain for every specialist compared to an average of 264 patients treated by each radiation oncologist in the U.S. in 2003 (Lewis and Sunshine, 2007)
- › As a result, most pain care must (and should) be provided by primary care practitioners (Institute of Medicine, 2001)



Costs of Pain in USA

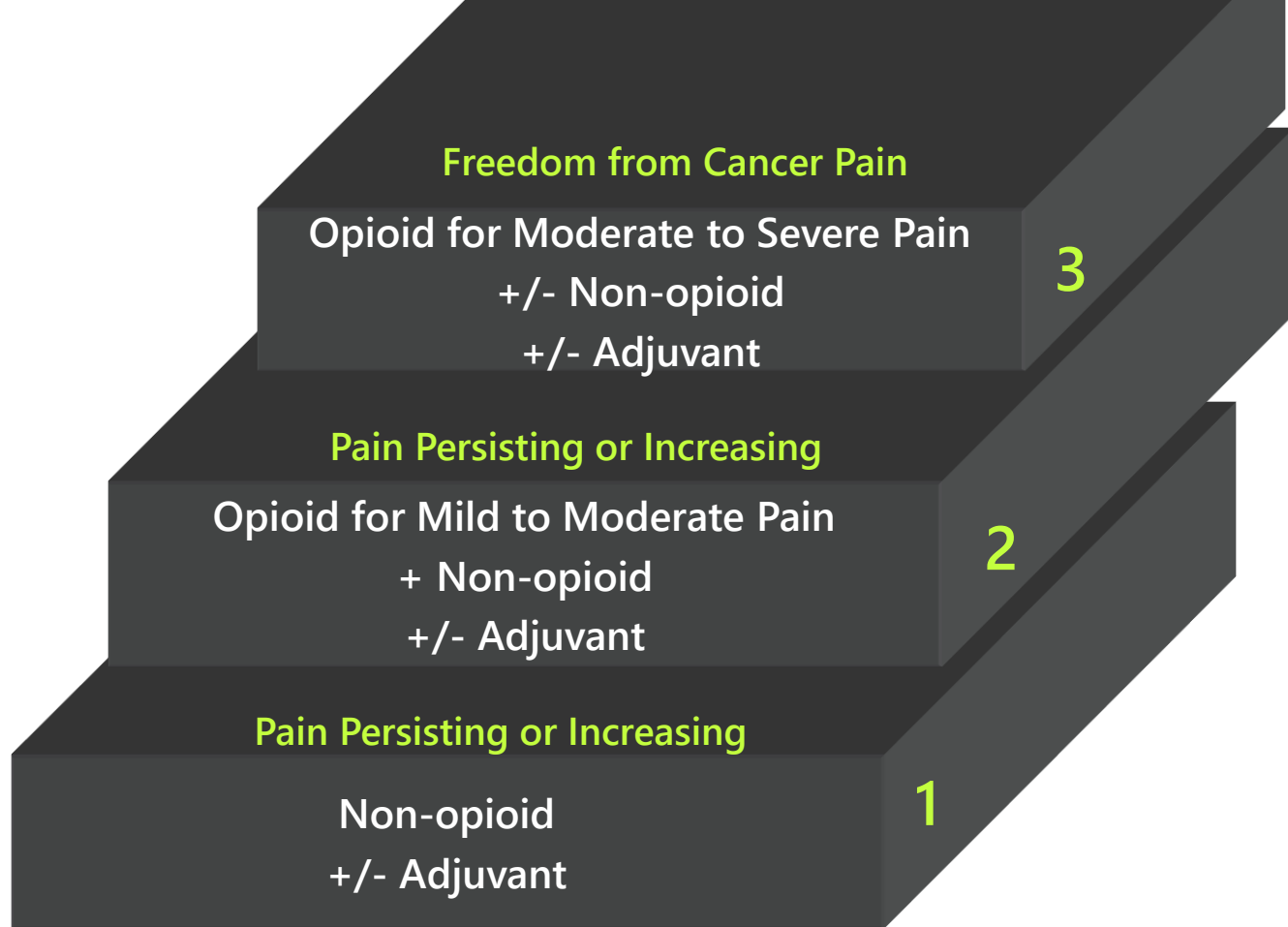
› Cost of Chronic Pain	\$ 600+ billion
› Heart Disease	\$ 309 billion
› Cancer	\$ 243 billion
› Injury & Poisoning	\$ 205 billion
› Diabetes	\$ 188 billion

World Health Organization



WHO







Pain Care

- › In 1996 the World Health Organization indicated that the control of pain remained pervasively inadequate.
- › In 2010, IASP held a world congress on pain and called for acknowledgement of pain care as a human right.



Barriers to Adequate Pain Relief

- › Opiophobia
- › Discrimination
- › Litigation
- › Regulation
- › Socio-economic



Pain: Definitions

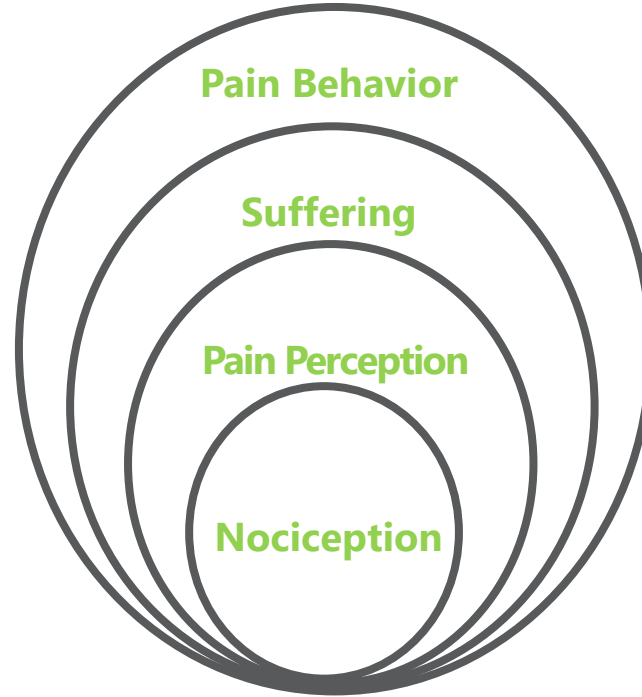
- › "Pain is an unpleasant sensory and emotional experience associated with actual or potential tissues damage or described in terms of such damage." (IASP, 1986)
- › "...is a multidimensional sensory experience that is intrinsically unpleasant and associated with hurting and soreness." (Woolf, CJ. Annal Intern Med, 2004, 140, 441-451)
- › "Chronic pain as a disease entity in its own right" European Federation of IASP Chapters (EFIC)
"Declaration on Pain." (Niv and Devor, Pain Practice, 2004, 4 179-181)



Pain (Chronic): An Alternative Definition

- › A constellation or collection of sensations, perceptions, behaviors, feelings, emotions and thoughts, occurring at the cellular to whole organism levels, constantly changing in accordance with experience and involving a dynamic interaction of multiple physiological, chemical and psychological systems.
 - Daniel Doleys, PHD

Pain - A Conceptual Approach



Loeser JD, Cousins MJ. *Med J Aust.* 1990;153:208-12, 216.



Pain

› No Direct Relationship Between

- Tissue Damage
- Severity of Pain
 - Beecher (1959)

Chronic Pain is NOT an extension of Acute Pain



Acute Pain

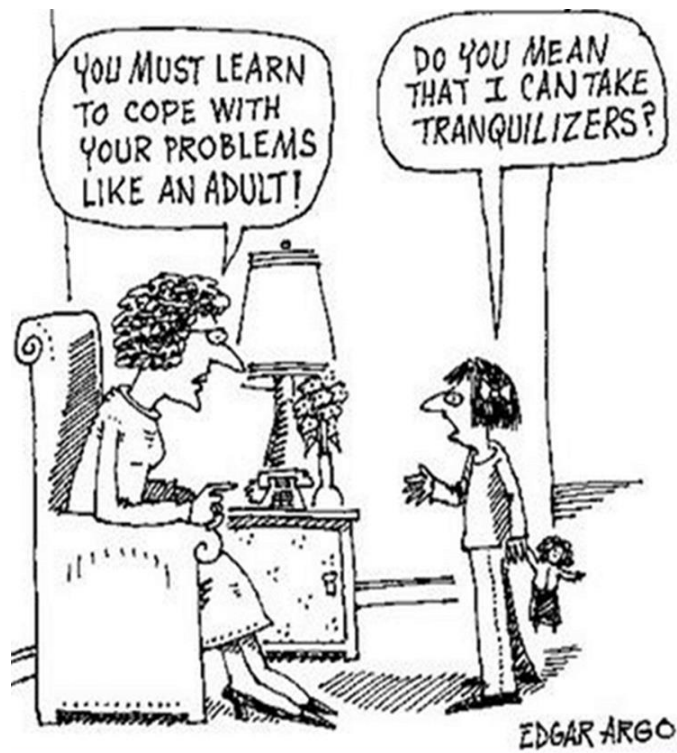
Chronic Pain

- › Acute in the sense of injury/trauma
- › Duration: >3 or 6 months; beyond usual healing time
- › “It is not the duration of pain that distinguishes acute from chronic pain, but more importantly, the inability of the body to restore its physiological functions to normal homeostatic levels.”
(Loser JD, Melzack R. Pain: an overview. The Lancet, 1999; 53, 1607-1609)
- › CONSEQUENCE: Treat a chronic condition with ‘acute’ philosophy (emphasis on ‘pain’)



Peripheralist vs. Centralist

Pain is not an opioid deficiency



Opiates





History of Opiate Laws in the USA

1906 - Pure Food and Drug Act

- Federal Consumer Protection against harmful agents. Lead to creation of the FDA.

1909 - Smoking Opium Exclusion Act

- First federal law banning the non-medical use of a substance.

1924 - Heroin Act

- Made heroin illegal even for medicinal use.

1938 - Food, Drug and Cosmetic Act

- Brought cosmetics and medical devices under control with appropriate labeling.

1951 - Boggs Act

- Established criminal penalties for drug related offences.

1970 - Controlled Substance Act

- Established five schedules of drugs. Also lead to the formation of the D.E.A.

1986 - Anti-Drug Abuse Act

- Helped establish effective drug abuse prevention and education programs.

1996 - HIPAA

- Health Insurance Portability and Accountability Act.

2000 - Drug Addiction Treatment Act

- Qualifies physicians to treat opioid dependency in their offices.



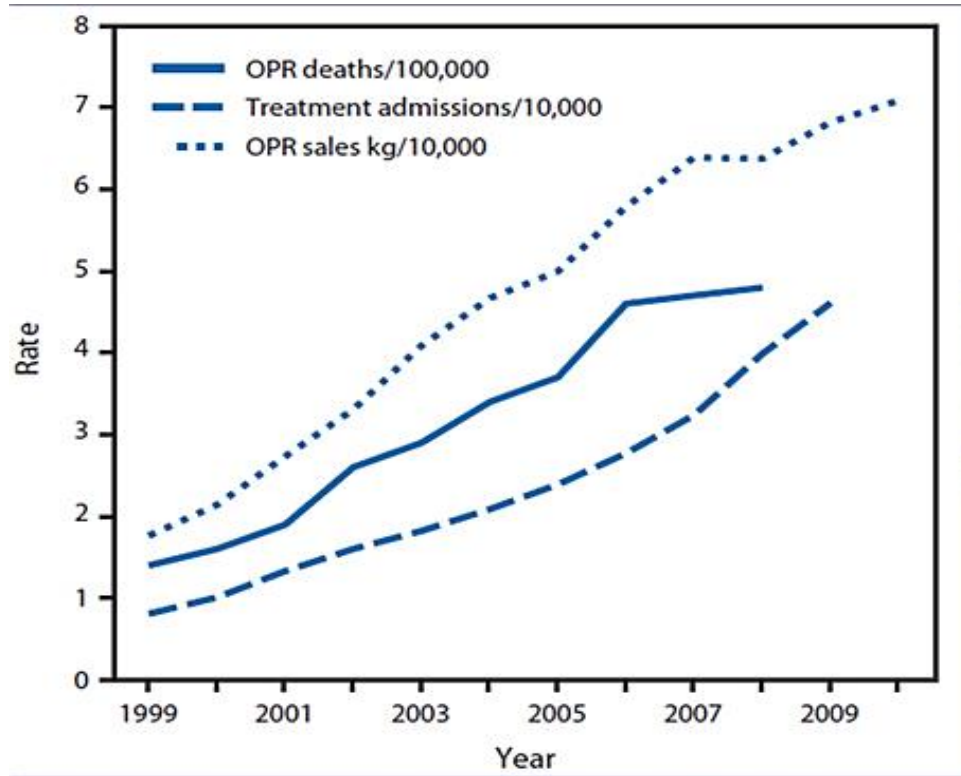
Narcotics

- › Half a million ER visits annually due to misuse or abuse.
- › CDC reported a fourfold increase in deaths from prescription narcotics over the past decade.
- › Fourfold increase in the number of narcotic prescriptions
- › Half of prescription pain killer deaths involve 1 other drug
- › Nearly 20% of the population has misused prescription drugs for non-medicinal purposes.
- › Drug related deaths now out-number traffic related fatalities

Opioid Use and Mortality

Rates* of opioid pain reliever (OPR) overdose death, OPR treatment admissions and kilograms of OPR sold – United States, 1999-2010

*Age adjusted rates per 100,000 population for OPR deaths, crude rates per 10,000 population for OPR abuse treatment admissions, and crude rates per 10,000 population for kilograms of OPR sold



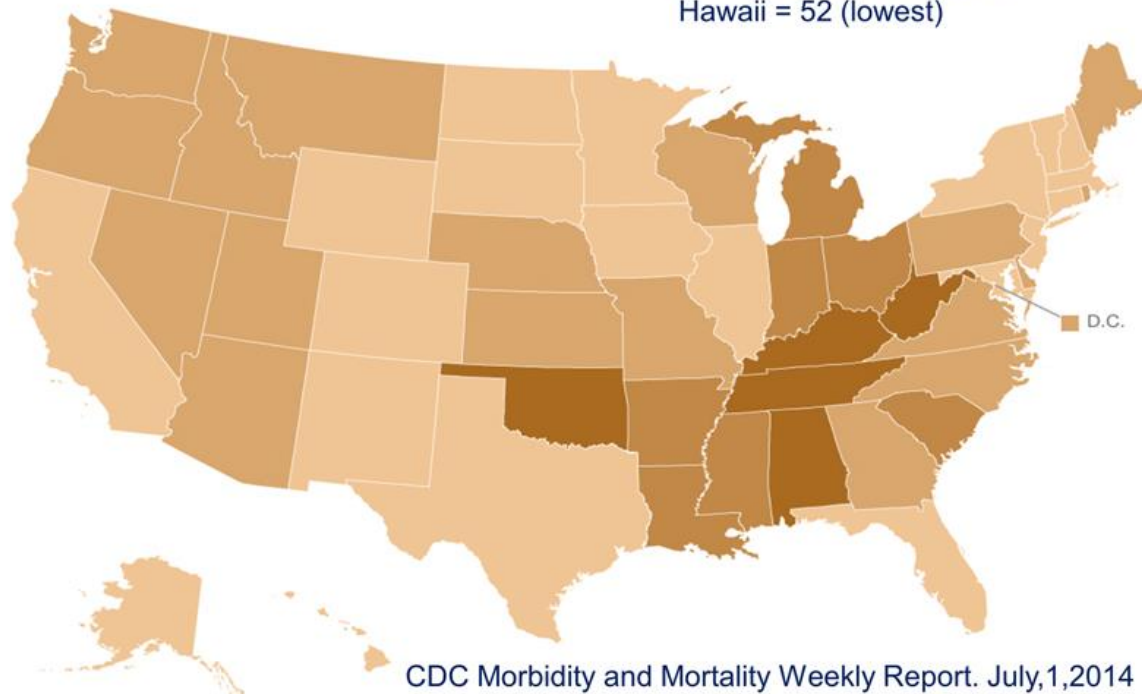
Paulozzi L.J. Jones CM, Mack KA, Rudd RA. Vital signs: overdose of prescription opioid pain relievers – United States, 1999-2008. CDC MMWR 2011; 60(43): 1487-1492

Opioid Prescriptions - 2012

Prescriptions of opioid pain relievers
in 2012, per 100 people

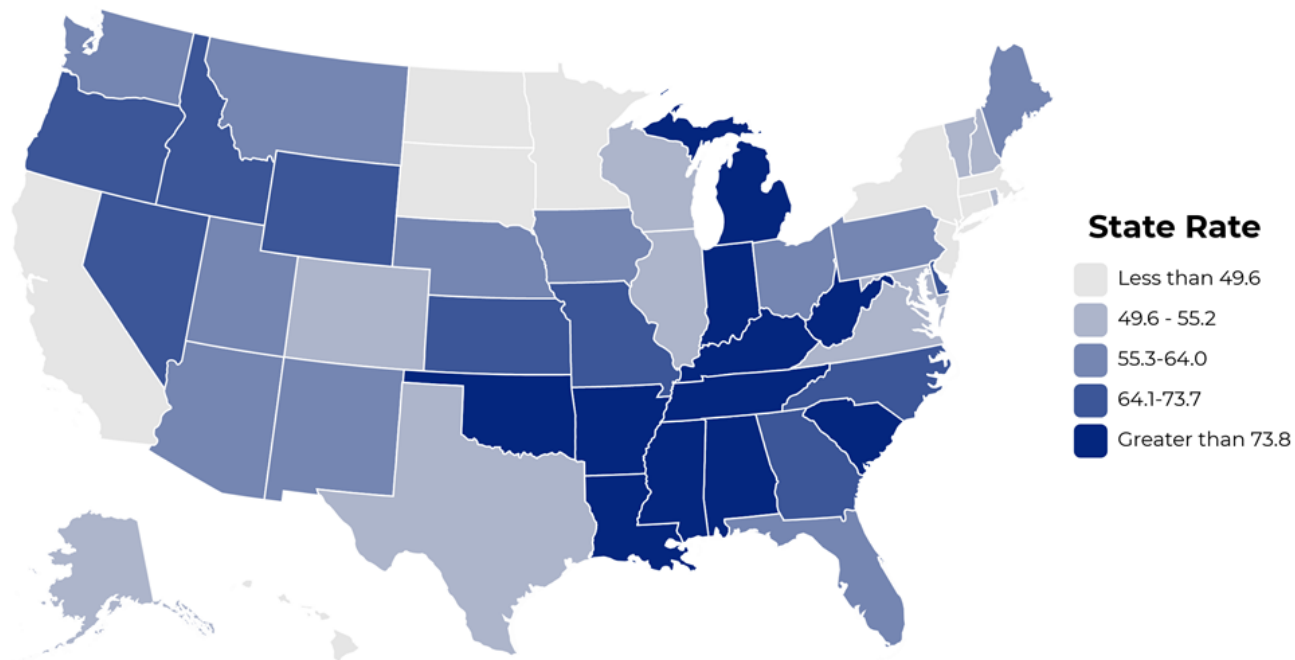
50 75 100 125 150

National average = 82.5
Alabama = 142 (highest)
Hawaii = 52 (lowest)



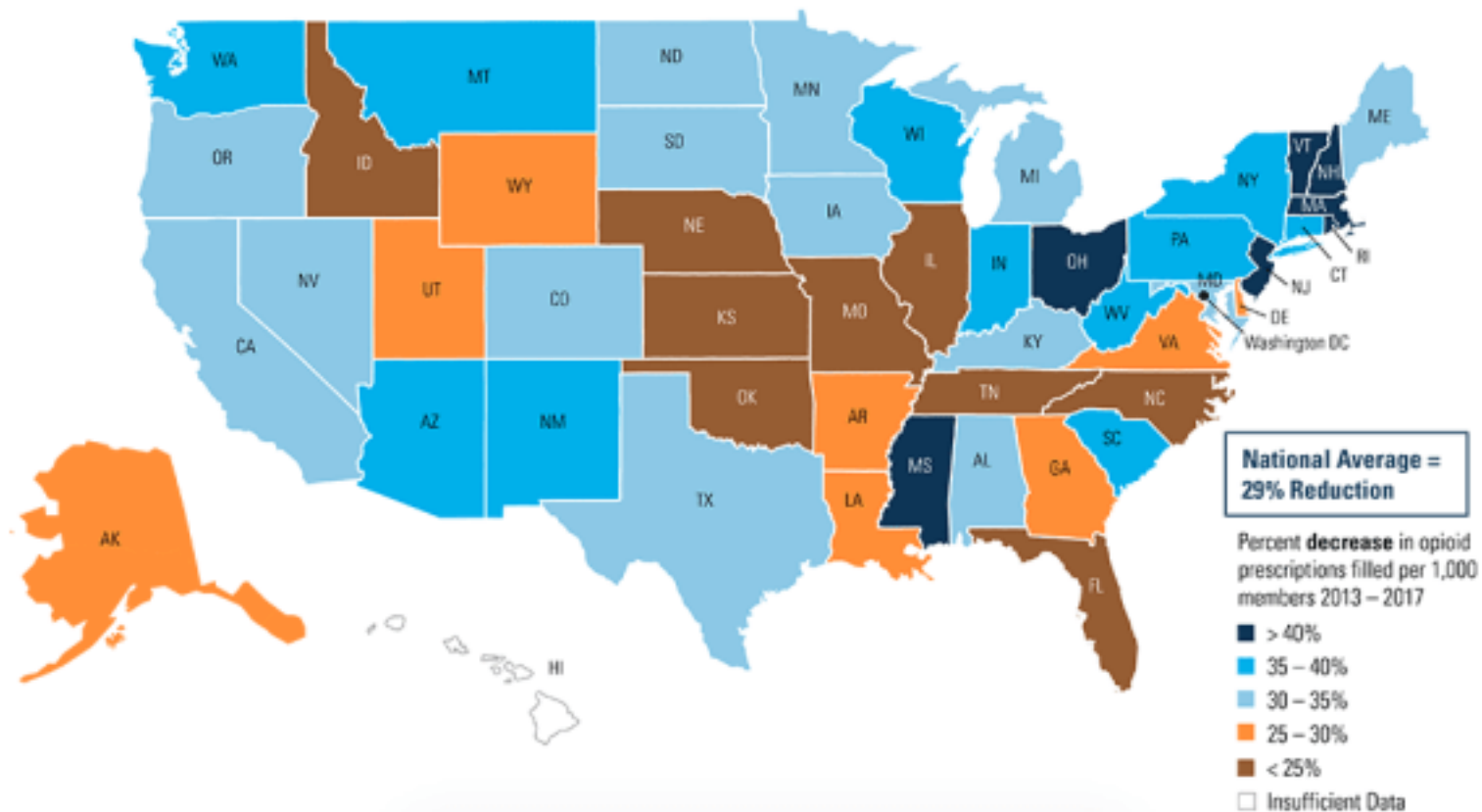


State Opioid Prescribing Rates per 100 Persons, 2017



[U.S. Centers for Disease Control and Prevention](#)

EXHIBIT 3: OPIOID PRESCRIPTION FILL RATE DECLINE BY STATE (2013 TO 2017)



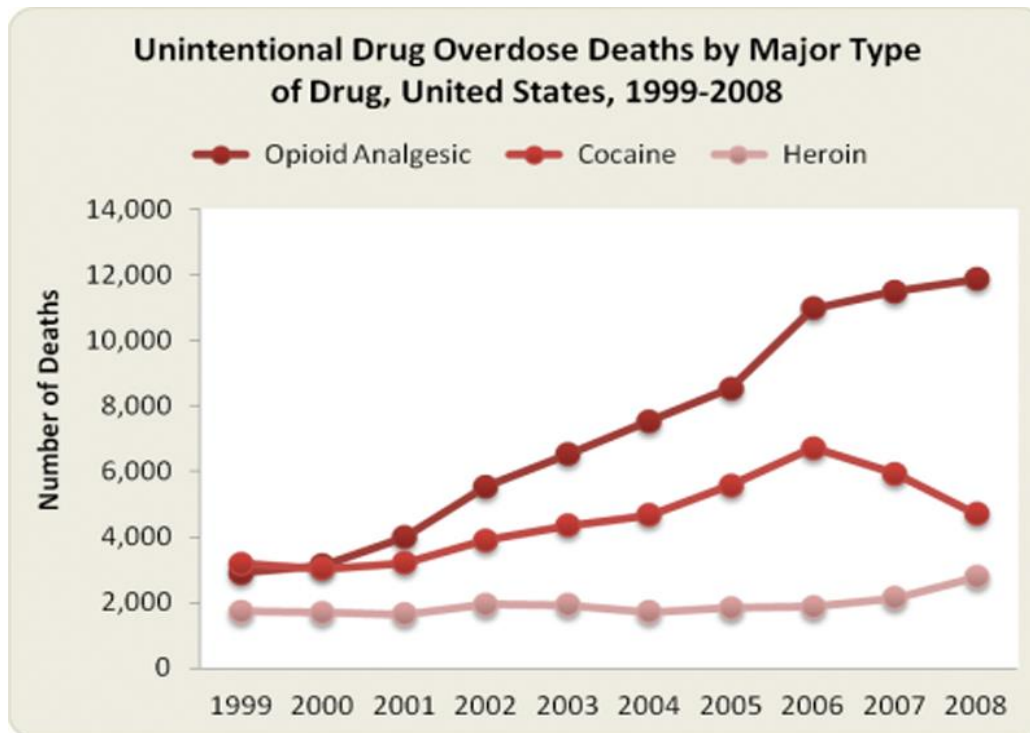


Highest Per-Capita Opioid Prescription Rates in 2016

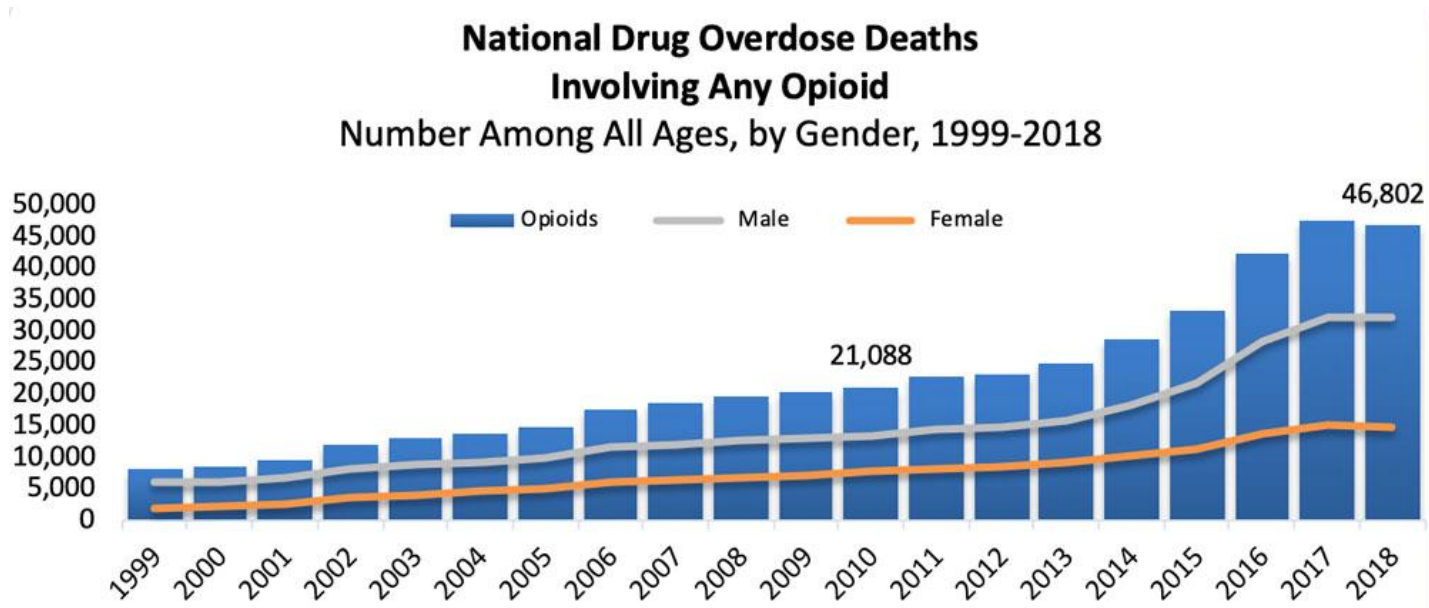
The states with the highest rates are:

1. Alabama: 121
2. Arkansas: 114.6
3. Tennessee: 107.5
4. Mississippi: 105.6
5. Louisiana: 98.1
6. Oklahoma: 97.9
7. Kentucky: 97.2
8. West Virginia: 96
9. South Carolina: 89.4
10. Michigan: 84.9
25. Pennsylvania: 69.5

Drug Overdoses - 1999 to 2008



National Drug Overdose Deaths Involving Any Opioid - Number Among All Ages, by Gender, 1999-2018.




The figure above is a bar and line graph showing the total number of U.S. overdose deaths involving any opioid from 1999 to 2018. Any opioid includes prescription opioids (and methadone), heroin and other synthetic narcotics (mainly fentanyl or fentanyl analogs). Opioid-involved overdose deaths rose from 21,088 in 2010 to 47,600 in 2017 and remained steady in 2018 with 46,802 deaths. The bars are overlaid by lines showing the number of deaths by gender from 1999 to 2018 (Source: CDC WONDER).



Total Opioid Prescriptions Dispensed in U.S.

The yearly number of prescriptions over an 11-year span:

- › 2006: 215,917,663
- › 2007: 228,543,773
- › 2008: 237,860,213
- › 2009: 243,738,090
- › 2010: 251,088,904
- › 2011: 252,167,963
- › 2012: 255,207,954
- › 2013: 247,090,443
- › 2014: 240,993,021
- › 2015: 226,819,924
- › 2016: 214,881,622



Oxycontin 20 mg tablets
was the most frequently
prescribed pharmaceutical
in the state of PA



Methadone

› Pharmacokinetics

- Fluctuates, creating difficult dosing which increases risk for overdose

› Dosing

- Avoid using equianalgesic conversion charts

› Side Effects

- Cardiac and neurologic

› Narrow Therapeutic Window

- Small margin between therapeutic and toxic dose

› Long Half-Life



Compounded Medications

- › Not FDA Approved
- › Higher Costs
- › Unproven Efficacy and Safety
- › Polypharmacy

CDC Guideline for Prescribing Opioids for Chronic Pain — United States, 2016



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

CDC RECOMMENDATIONS

DETERMINING WHEN TO INITIATE OR CONTINUE OPIOIDS FOR CHRONIC PAIN

1

OPIOIDS ARE NOT FIRST-LINE THERAPY

Nonpharmacologic therapy and **nonopioid pharmacologic therapy** are preferred for chronic pain. Clinicians should consider opioid therapy only if 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.

2

ESTABLISH GOALS FOR PAIN AND FUNCTION

Before starting opioid therapy for chronic pain, clinicians should establish treatment goals with all patients, including realistic goals for pain and function, and should consider how opioid 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.

3

DISCUSS RISKS AND BENEFITS

Before starting and periodically during opioid therapy, clinicians should discuss with patients known risks and realistic benefits of opioid therapy and patient and clinician responsibilities for managing therapy.

Nonpharmacologic therapies and nonopioid medications include:

- Nonopioid medications such as acetaminophen, ibuprofen, or certain medications that are also used for depression or seizures
- Physical treatments (eg, exercise therapy, weight loss)
- Behavioral treatment (eg, CBT)
- Interventional treatments (eg, injections)

OPIOID SELECTION, DOSAGE, DURATION, FOLLOW-UP, AND DISCONTINUATION

4

USE IMMEDIATE-RELEASE OPIOIDS WHEN STARTING

When starting opioid therapy for chronic pain, clinicians should prescribe **immediate-release opioids** instead of extended-release/long-acting (ER/LA) opioids.

Immediate-release opioids: faster acting medication with a shorter duration of pain-relieving action

5

USE THE LOWEST EFFECTIVE DOSE

When opioids are started, clinicians should prescribe the lowest effective dosage. Clinicians should use caution when prescribing opioids at any dosage, should carefully reassess evidence of individual benefits and risks when considering increasing dosage to ≥ 50 **morphine milligram equivalents (MME)/day**, and should avoid increasing dosage to ≥ 90 MME/day or carefully justify a decision to titrate dosage to ≥ 90 MME/day.

Extended release opioids: slower acting medication with a longer duration of pain-relieving action

6

PRESCRIBE SHORT DURATIONS FOR ACUTE PAIN

Long-term opioid use often begins with treatment of acute pain. When opioids are used for acute pain, clinicians should prescribe the lowest effective dose of immediate-release opioids and should prescribe no greater quantity than needed for the expected duration of pain severe enough to require opioids. Three days or less will often be sufficient; more than seven days will rarely be needed.

Morphine milligram equivalents (MME)/day: the amount of morphine an opioid dose is equal to when prescribed, often used as a gauge of the abuse and overdose potential of the amount of opioid that is being given at a particular time

7

EVALUATE BENEFITS AND HARMS FREQUENTLY

Clinicians should evaluate benefits and harms with patients within 1 to 4 weeks of starting opioid therapy for chronic pain or of dose escalation. Clinicians should 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, clinicians should optimize other therapies and work with patients to taper opioids to lower dosages or to taper and discontinue opioids.

8

USE STRATEGIES TO MITIGATE RISK

Before starting and periodically during continuation of opioid therapy, clinicians should evaluate risk factors for opioid-related harms. Clinicians should incorporate into the management plan strategies to mitigate risk, including considering offering **naloxone** when factors that increase risk for opioid overdose, such as history of overdose, history of substance use disorder, higher opioid dosages (≥ 50 MME/day), or concurrent **benzodiazepine** use, are present.

Naloxone: a drug that can reverse the effects of opioid overdose

9

REVIEW PDMP DATA

Clinicians should review the patient's history of controlled substance prescriptions using state **prescription drug monitoring program (PDMP)** data to determine whether the patient is receiving opioid dosages or dangerous combinations that put him or her at high risk for overdose. Clinicians should review PDMP data when starting opioid therapy for chronic pain and periodically during opioid therapy for chronic pain, ranging from every prescription to every 3 months.

Benzodiazepine: sometimes called "benzo," is a sedative often used to treat anxiety, insomnia, and other conditions

PDMP: a prescription drug monitoring program is a statewide electronic database that tracks all controlled substance prescriptions

10

USE URINE DRUG TESTING

When prescribing opioids for chronic pain, clinicians should use urine drug testing before starting opioid therapy and consider urine drug testing at least annually to assess for prescribed medications as well as other controlled prescription drugs and illicit drugs.

11

AVOID CONCURRENT OPIOID AND BENZODIAZEPINE PRESCRIBING

Clinicians should avoid prescribing opioid pain medication and benzodiazepines concurrently whenever possible.

12


OFFER TREATMENT FOR OPIOID USE DISORDER

Clinicians should offer or arrange evidence-based treatment (usually **medication-assisted treatment** with buprenorphine or methadone in combination with behavioral therapies) for patients with opioid use disorder.

Nearly 2M Americans, aged 12 or older, either abused or were dependent on prescription opioids in 2014

Medication-assisted treatment: treatment for opioid use disorder including medications such as buprenorphine or methadone





Official Disability Guidelines (ODG) for Opioid Therapy Recommendations

- › Use caution for driving and safety sensitive work
- › Standard treatment for acute pain but use lowest dose for shortest amount of time
- › NOT to be used as first-line treatment for chronic non-cancer pain
- › Not a first-line treatment for acute OR chronic low back pain
- › Third-line treatment for neuropathic pain
- › Limit use of long-acting opioids
- › Regular physician visits and risk assessment

Pennsylvania Prescription Drug Monitoring Program (PA PDMP)

- › Collects information on all filled prescriptions for Scheduled II-V Controlled Substances.
- › August 20, 2016 - Prescribers, by law, must query the PDMP the first time a patient is prescribed a controlled substance.
- › As of January 1, 2017- Must query each time a patient is prescribed an opioid or benzodiazepine
 - Must record in EMR:
 - New Patient/New Prescription
 - Inconsistencies found in system

The graphic is a white rectangular box with a thin grey border. At the top left is the Pennsylvania Department of Health logo, which includes a blue silhouette of the state of Pennsylvania with a white caduceus inside, followed by the text "pennsylvania" in blue and "DEPARTMENT OF HEALTH" in smaller blue capital letters. To the right of the logo is an illustration of two pill bottles, one orange and one yellow, with several red and white capsules spilled out. Below the logo, the title "PRESCRIPTION DRUG MONITORING PROGRAM" is written in bold red capital letters. Underneath the title is a paragraph of text in black. To the right of this paragraph is another paragraph of text. Below the text is a blue icon of a house with a white cross inside. To the right of the icon is the heading "NEED HELP?" in bold red capital letters, followed by a paragraph of text and a red arrow pointing to the website "apps.ddap.pa.gov/GetHelpNow" and the phone number "717-783-8200". Below this is the heading "YOUR RIGHTS" in bold red capital letters, followed by a paragraph of text. At the bottom of the graphic is a dark blue horizontal bar with white text that says "For more information, visit www.doh.pa.gov/PDMP". Below this bar is a light blue box containing a paragraph of text.

pennsylvania
DEPARTMENT OF HEALTH

PRESCRIPTION DRUG MONITORING PROGRAM

To prevent prescription drug abuse and protect the health and safety of our community, the Pennsylvania Department of Health collects information on all filled prescriptions for controlled substances. Controlled substances are drugs that have potential for abuse or dependence.

This information helps health care providers safely prescribe controlled substances and helps patients get the treatment they need.

NEED HELP?
If you or someone you care about needs addiction treatment, visit:
▶ apps.ddap.pa.gov/GetHelpNow
or call **717-783-8200**.

YOUR RIGHTS

Patients have the right to review and correct the information collected by the Prescription Drug Monitoring Program (PDMP) once per calendar quarter at no cost.

If you would like a copy of your information, complete the form provided on the PDMP website and mail it to the address on the form.

For more information, visit www.doh.pa.gov/PDMP.

Patients can receive a copy of their information more than once per calendar quarter for a fee of \$20 per copy. Prescription records will be maintained for seven years. Authorized users of the PDMP system include prescribers, dispensers, the attorney general's office (on behalf of law enforcement), designated commonwealth personnel, and medical examiners or county coroners. Prescription information is confidential and is not subject to the act of Feb. 14, 2008 (P.L.6, No.3), known as the Right-to-Know Law.

Prescribing Opioids





First-line Analgesics

- › Acetaminophen
- › NSAIDS
- › “Muscle Relaxants”
 - Neuromuscular Blockers
 - Spasmolytics



Opioid Efficacy Determined By:

- › Pharmacokinetics/Dynamics (Genetic Testing)
- › Route of administration
- › Duration of treatment: acute vs. chronic
- › Type of pain: Nocicep vs. Neuropathic
- › Conditioning factors
- › Psycho-social factors: readiness, acceptance, mood, personality, addiction, psycho-pathology
- › Outcomes measures(s) used
- › Most variables are dynamic vs. static




Routes of Administration

- › Topical
- › Transdermal
- › Subcutaneous
- › Intramuscular
- › Intravenous
- › Intrathecal
- › Oral



Unsupported Myths Re: Opioid Therapy

- › Leads to addiction: Especially if there is no history of drug abuse or genetic history
- › Route of Administration: Addiction is not in the drug or route of administration (i.e. IM, IV, PO, IT, etc.), but in the pattern of behavior
- › Agonist-antagonist drugs: Will prevent addiction
- › Short acting drugs: Are more likely to cause addiction than LA, SR, CR
- › No ceiling: Prescribe to effect/side-effect



In April 2011, FDA announced the elements of a Risk Evaluation and Mitigation Strategy (REMS) to ensure that the benefits of extended-release and long-acting (ER/LA) opioid analgesics outweigh the risks. The REMS supports national efforts to address the prescription drug abuse epidemic.



Essential Practice Principles

- › Assessing pain, expecting and recognizing analgesic failure and reacting to it by pursuing analgesic success rather than blindly accepting failure.
- › Therapeutic failure is quite common and in significant proportions of patients, but this should not deter pursuing another analgesic within the same or different class of drug.
- › Expectations need to be lowered to the level of clinical reality e.g., while long term opioid therapy may not benefit all patients with chronic non-cancer pain, it does help a certain proportion of patients and significantly so.

Moore et al, BMJ, 2013



Pain Management “Program”

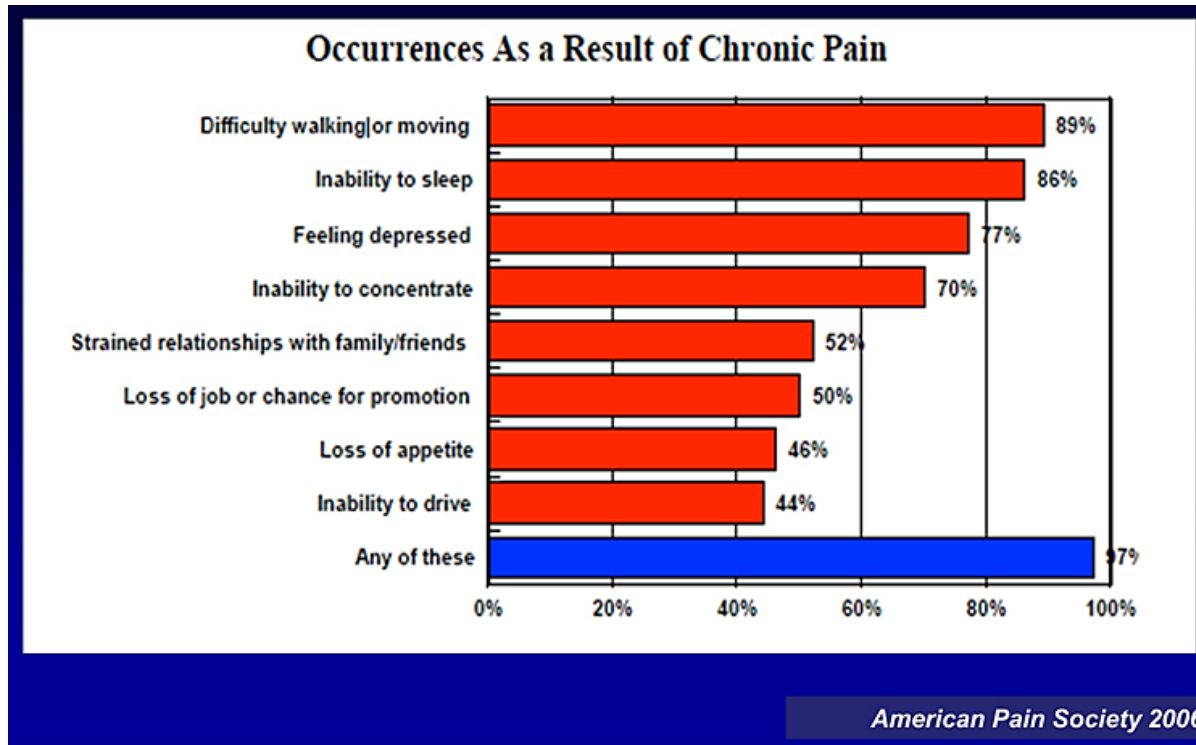
- I. Patient Selection
- II. Education
- III. Informed Consent
- IV. Initiating Treatment
- V. Monitoring
- VI. Terminating Treatment

I. Patient Selection

- › History
- › Physical
- › Risk Assessment



Voices of Chronic Pain



II. Education

- › Addiction
- › Pseudo-Addiction
- › Tolerance
- › Physical Dependence





Poll Question 1 - Preview

“Psychological dependence for the psychic effects of the medication characterized for the compulsive use despite harm” best describes which of the following:

- A. Physical Dependence
- B. Pseudo-Addiction
- C. Addiction
- D. Tolerance
- E. Symptom Exaggeration



Addiction

Psychological dependence for the psychic effects of the medication characterized by compulsive use despite harm

Pseudo-Addiction

Pattern of drug seeking behavior of pain patients who are receiving inadequate pain management that can be mistaken for addiction.



Tolerance

Physiologic state resulting from regular use of a drug in which an increased dosage is needed to produce the same effect or a reduced effect is observed with a constant dose.





Physical Dependence

Physiologic state whereby withdrawal may be seen if a drug is stopped or decreased abruptly if an antagonist is administered.



Poll Question 1

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- A. Physical Dependence
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- C. Addiction
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Poll Question 1 Answer

“Psychological dependence for the psychic effects of the medication characterized for the compulsive use despite harm” best describes which of the following:

- A. Physical Dependence
- B. Pseudo-Addiction
- C. **Addiction**
- D. Tolerance
- E. Symptom Exaggeration



Poll Question 2 - Preview

Which of the following would NOT be found in an Opioid Patient-Contract?

- A. Only one prescriber
- B. Only one pharmacy
- C. Use of random urine drug screens
- D. Patients may change drug doses as they feel fit
- E. Goals, risks, and expectations are outlined



III. Informed Consent

- › The patient's diagnosis, if known
- › The nature and purpose of a proposed treatment or procedure
- › The risks and benefits of a proposed treatment or procedure
- › Alternatives (regardless of their cost or the extent to which the treatment options are covered by health insurance)
- › The risks and benefits of the alternative treatment or procedure
- › The risks and benefits of not receiving or undergoing a treatment or procedure

<http://www.ama-assn.org/ama/pub/physician-resources/legal-topics/patient-physician-relationship-topics/informed-consent.page>



Factors Affecting Decision-Making Capacity in Patients with Pain

- › Pain
- › Treatment
- › Psychosocial Issues
- › Litigation
- › Autonomy



Opioid Contract

- › One prescriber
- › One pharmacy
- › Urine Drug Screen (UDS)
- › Goals
- › Risks
- › Expectations



Opioid Contract

- › Clear description and expectation of medication use and abuse as well as consequences of violating the contract and the procedure for opioid discontinuation should this become necessary.



Poll Question 2 Answer

Which of the following would NOT be found in an Opioid Patient- Contract?

- A. Only one prescriber
- B. Only one pharmacy
- C. Use of random urine drug screens
- D. Patients may change drug doses as they feel fit
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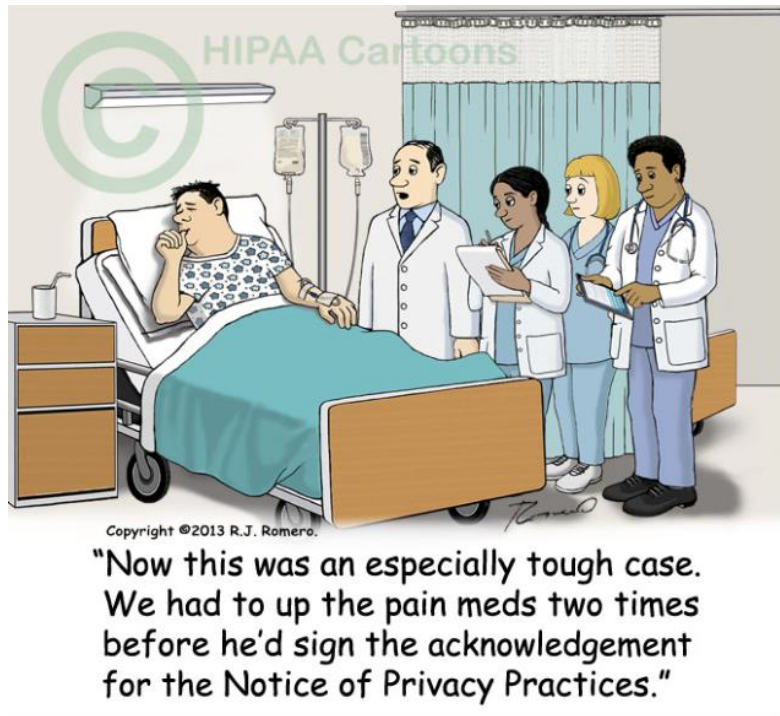


Poll Question 3 - Preview

Morbidity Associated with Chronic Opioid Therapy includes:

- A. Hyperalgesia
- B. Hormonal Imbalance
- C. Immunological Effects
- D. None of the above
- E. All of the Above

IV. Initiating Treatment





Morbidity Associated with Chronic Opioid Therapy

- › Hyperalgesia
- › Hormonal Imbalance
- › Immunological Effects

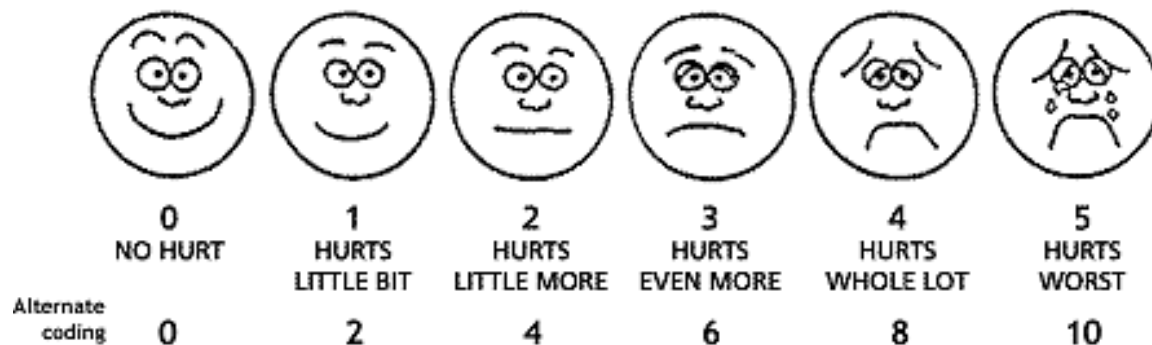


Causes of Deficient Pain Control

- › Under-dosing
- › Tolerance
- › Disease progression
- › Opioid-induced abnormal pain sensitivity
- › Addiction

V. Monitoring

- › Quality of life scales
- › Document function
- › Review adverse effects



The 5 A's of Pain Management

A nalgesia: verbal report rating scales

A ffect: MSE, significant others, Beck Depression Inventory

A ctivities of daily living: Oswestry D.I., 3-5 new activities

A dverse effects: check-list, exam, labs

A bberant drug related behavior: chart review, PDMP, office staff



Medical Restrictions

- › In the absence of signs or symptoms of impairment, no evidence exists to suggest that patients maintained on chronic opioid therapy should be restricted from driving or engaging in most work activities.



Opioids

- › GI side effects, constipation
- › Dry mouth, caries
- › Sedation
- › Loss of balance
- › Reduced immune response
- › Hormonal suppression
- › Addiction
- › Diversion
- › Mortality



Poll Question 3

Morbidity Associated with Chronic Opioid Therapy includes:

- A. Hyperalgesia
- B. Hormonal Imbalance
- C. Immunological Effects
- D. None of the above
- E. All of the Above



Poll Question 3 Answer

Morbidity associated with Chronic Opioid Therapy includes:

- A. Hyperalgesia
- B. Hormonal Imbalance
- C. Immunological Effects
- D. None of the above
- E. All of the Above

VI. Terminating Treatment

- › Aberrant behaviors
- › Drug abuse/diversion
- › Intolerable side effects
- › Failure to progress towards goals





UDS - Typical Detection Times

› Buprenorphine	up to 11 days
› Codeine	2-4 days
› Fentanyl	2-3 days
› Hydrocodone	2-4 days
› Hydromorphone	2-4 days
› Meperidine	2-4 days
› Methadone	up to 14 days
› Morphine	2-4 days
› Oxymorphone	2-4 days
› Propoxyphene	up to 7 days
› Tramadol	2-4 days



Drug Information Common to the Class of Extended-Release and Long-Acting Opioid Analgesics (ER/LA opioid analgesics)

- › Avinza (morphine sulfate ER capsules)
- › Butrans (buprenorphine transdermal system)
- › Dolophine (methadone HCl tablets)
- › Duragesic (fentanyl transdermal system)
- › Embeda (morphine sulfate ER-naltrexone capsules)
- › Exalgo (hydromorphone HCl ER tablets)
- › Hysingla ER (hydrocodone bitartrate) ER tablets
- › Kadian (morphine sulfate ER capsules)
- › MS Contin (morphine sulfate ER tablets)
- › Nucynta ER (tapentadol HCl ER tablets)
- › Opana ER (oxymorphone HCl ER tablets)
- › OxyContin (oxycodone HCl ER tablets)
- › Targiniq ER (oxycodone HCl/naloxone HCl ER tablets)
- › Zohydro ER (hydrocodone bitartrate ER capsules)

Equianalgesic Opioid Dosing

Drug	Equianalgesic Doses (mg)	
	Parenteral	Oral
Morphine	10	30
Buprenorphine	0.3	0.4 (sl)
Codeine	100	200
Fentanyl	0.1	NA
Hydrocodone	NA	30
Hydromorphone	1.5	7.5
Meperidine	100	300
Oxycodone	10*	20
Oxymorphone	1	10
Tramadol	100*	120

*Not available
in the US

McPherson ML. *Demystifying Opioid Conversion Calculations: A Guide For Effective Dosing*. Amer Soc of Health-Systems Pharm, Bethesda, MD, 2010. Copyright ASHP, 2010. Used with permission.

NOTE: Learner is STRONGLY encouraged to access original work to review all caveats and explanations pertaining to this chart.



Goals

- › Make a diagnosis
- › Identify comorbidities
- › Evaluate psycho-social factors
- › Assess functional status
- › Surveillance
- › Medical documentation
- › Multidisciplinary care

John Belushi Amy Winehouse Michael Jackson
John Bonham Janis Joplin
Lenny Bruce Thomas Kinkade
Truman Capote Josiah Lambourn
Kurt Cobain Tom Petty Heath Ledger
Chris Farley Bruce Lee
Errol Flynn Marilyn Monroe
Sigmund Freud Keith Moon
Judy Garland Prince River Phoenix
Jimi Hendrix
Philip Seymour Hoffman Socrates
Whitney Houston Edgar Allan Poe
Howard Hughes Elvis Presley
David Ruffin Sid Vicious
Anna Nicole Smith Carrie Fisher Hank Williams

Thank You!

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