

## The Concept of Balance in Chronic Pain Management

### Prescribing Opioids for Patients with Current or Previous History of Substance Abuse

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## US Controlled Substances Regulatory Policy Is Guided by the Principle of Balance

“Preventing drug abuse is an important societal goal, but there is a consensus, by law enforcement agencies, health care practitioners, and patient advocates alike, that it should not hinder patients’ ability to receive the care they need and deserve.”

- DEA, October 23, 2001

## US Controlled Substance Regulatory Policy Is Guided by the Principle of Balance

“We want a balanced approach that addresses the abuse without keeping patients from getting the care they need and deserve.”

-Asa Hutchinson  
Administrator, DEA

## Defining the Issues

- **Misunderstandings about addiction, tolerance, dependence**
- **Difficulties in assessing patient’s risk**
- **Absence of articulated strategies to manage patients at risk**

(Passik, 2000; Passik 1998)

## The Terminology of Abuse

- **Physical Dependence**
  - Abstinence syndrome induced by administration of an antagonist or by dose reduction
  - Usually unimportant if abstinence is avoided
  - Assumed to exist after few days’ dosing but actually highly variable
  - Does not independently cause addiction
- **Addiction**
  - Disease with pharmacologic, genetic, psychosocial elements
  - Fundamental features: loss of control, compulsive use, use despite harm
  - Diagnosed by observation of aberrant drug-related behavior

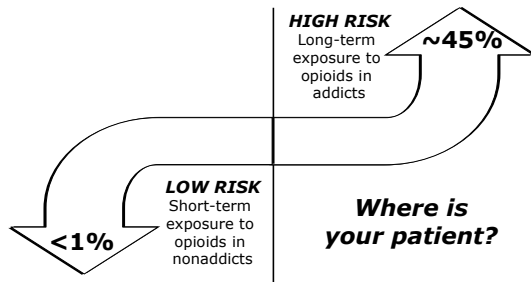
(AAPM/APS, 1996; NIDA, 2001; Passik et al., 2000; Portenoy, 1996)

## The Terminology of Abuse

- **Tolerance**
  - Diminished drug effect from drug exposure
  - Varied types: associative vs. pharmacological
  - Tolerance to analgesia is seldom a problem in the clinical setting:
    - Tolerance rarely “drives” dose escalation
    - Tolerance does not cause addiction
- **Pseudoaddiction**
  - Aberrant drug-related behaviors driven by uncontrolled pain
  - Reduced by improved pain control
  - Complexities
    - How aberrant can behavior be before it is inconsistent with pseudoaddiction?
    - Can addiction and pseudoaddiction coexist?

(Passik et al. 1998; Passik et al. Portenoy RK, 1996)

## Risk of Addiction or Aberrant Behavior With Opioids



Porter, 1980; Dunbar, 1996; Passik, 1998

## Diagnosing and Monitoring Aberrant Behaviors

### Two-Step Monitoring Approach

- **Step 1:** Are there aberrant drug-related behaviors?
- **Step 2:** If yes, are these behaviors best explained by the existence of an addiction disorder?

### Differential Diagnosis

- Addiction/pseudoaddiction
- Other psychiatric disorders (e.g., borderline personality disorder)
- Mild encephalopathy
- Family disturbances
- Criminal intent

(Passik et al, 1998; Passik et al, 1998)

## Risk Assessment for Addiction

### Low Addiction Risk

- Acute pain
- Cancer pain
- Patients without abuse background or psychopathology

### Chronic Noncancer Pain

- Probability of addiction is small
  - surveys that include patients with abuse or psychopathology show mixed results
- Predictors of addiction may include
  - history of substance abuse
  - Age
  - personality factors
  - family dynamics and social factors

(Passik et al, 1998; Passik et al, 1998)

## Drug-Related Behavior Predictive of Addiction

### Probably More Predictive

- Selling prescription drugs
- Prescription forgery
- Stealing or “borrowing” drug from another person
- Injecting oral formulation
- Obtaining prescription drugs from non-medical source
- Multiple episodes of prescription “loss”
- Concurrent abuse of related illicit drugs
- Multiple dose escalations despite warnings
- Repeated episodes of gross impairment or dishevelment

### Probably Less Predictive

- Aggressive complaining
- Drug hoarding when symptoms milder
- Requesting specific drugs
- Acquisition of drugs from other medical sources
- Unsanctioned dose escalation once or twice
- Unapproved use of the drug to treat another symptom
- Reporting psychic effects not intended by the clinician
- Occasional impairment

(Passik et al, 1998)

## Addressing Aberrant Drug-Related Behavior


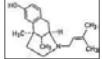

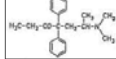
- **General Management Principles**
  - know laws and regulations
  - structure therapy to match perceived risk
- **Proactive Strategies**
  - communicate goals of therapy
  - provide written guidelines (treatment contract)
  - assess often
- **Reactive Strategies**
  - require frequent visits and small quantities of drug
  - use of urine toxicologies
  - long-acting drugs with no rescue doses
  - relate to addiction-medicine community (sponsor, program, addiction-medicine specialist, psychotherapist)

(Mironer et al, 2000; Portenoy et al, 1997; Passik et al, 2000)

## Opioid Contracts

- One provider writes Rx
- One pharmacy dispenses medication
- No dose escalation w/o input of practitioner
- No early refills
- Limited or no access to prn meds for chronic pain
- Consent to random urine and/or serum screens
- Appropriate behavior to all professional staff
- Consequences will follow if contract is broken:
  - 1 warning (depending on behavior)
  - (+) for cannabinoids or heroin vs hydromorphone
  - Change of medication (no opioid or alternative opioid)

## Chemical Classes of Opioids

	PHENANTHRENES	BENZOMORPHANS	PHENYLPYPERIDINES	DIPHENYLHEPTANES
Rx EXAMPLES >				
	<p><b>MORPHINE</b></p> <p>morphine codeine hydrocodone* hydromorphone* levorphanol* oxycodone* oxymorphone* buprenorphine* nalbuphine butorphanol* naloxone* heroin (diacetyl-morphine)</p>	<p><del>pentazocine</del> <del>diphenoxylate</del> <del>loperamide</del></p>	<p><b>MEPERIDINE</b></p> <p><del>pentamyl</del> <del>alfentanil</del> <del>remifentanyl</del></p>	<p><del>methadone</del> <del>propoxyphene</del></p>
X-SENSITIVITY >	PROBABLE	POSSIBLE	LOW RISK	LOW RISK

\*These agents lack the 6-OH group of morphine, possibly decreasing cross-sensitivity within the phenanthrene group.  
Reisner T, Pasternak G. Opioid analgesics and antagonists. In: Hardman JG, Limbird LE, Molinoff PB, Ruzdon RW, Gilman AG, eds. Goodman and Gilman's The Pharmacological Basis of Therapeutics. 9th ed. New York, NY: McGraw-Hill Companies; 1996:521-555.  
Wittke RE. Analgesic Agents. In: Detels J, Bannex WA, eds. Wilson and Gisvold's Textbook of Organic Medicinal Chemistry. 9th ed. JB Lippincott Company, Philadelphia, Pa. 1991:629-654.

## Sample Urine Drug Screen Cutoff Levels

Screen	Cutoff (ng/mL)
Amphetamine	1000
Barbiturate	200
Benzodiazepine	200
Cocaine	300
Opiates	2000
Cannabinoids	50
Methadone	300
PCP (phencyclidine)	25

Example: Beckman Synchron CX5CE at Memphis VAMC.

## Interpreting Urine Screens: Clinical Examples (cont'd)

Patient on DURAGESIC® (fentanyl transdermal system) CII and urine screen is negative.

What does it mean?

- Pt is not likely to be using the patch.
- Pt is on too low of a dose.
- Something went wrong with the lab test.
- Most phenylpiperidines are not included in urine toxicology screens.

## Interpreting Urine Screens: Clinical Examples (cont'd)

Patient on DURAGESIC with no medication for breakthrough pain and the urine screen is positive. What does it mean?

- Pt may be taking fentanyl as prescribed.
- Pt may be injecting heroin or hydromorphone.
- Pt may be snorting sustained released oxycodone.
- All of the above

Note: What is the implication with regard to DAWN data?

## Interpreting Urine Screens: Clinical Examples (cont'd)

- Patient on methadone and urine screen is negative. What does it mean?
  - Pt is likely diverting the methadone.
  - Pt is on too low of a methadone dose.
  - Something went wrong with the lab test.
  - Methadone is not included in urine toxicology screens.

## Interpreting Urine Screens: Clinical Examples (cont'd)

- Patient on methadone and urine screen is positive. What does it mean?
  - This is what we would expect.
  - Pt could be selling methadone and using propoxyphene instead.
  - A and B above are true.
  - None of the above

## Elements of Success

- Structure initial analgesic regimen based on risk
- Conduct ongoing assessment of behavior
- Educate the patient about responsible use of opioids

(Portenoy, 1997; Passik, 1998)

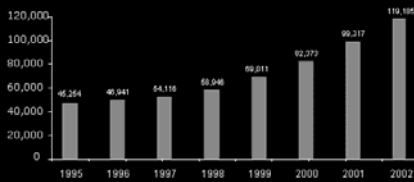
## The FSMB Model Guidelines

1. Patient evaluation
2. Treatment plan
3. Informed consent and agreement for treatment
4. Periodic review
5. Consultation
6. Medical records
7. Compliance with the controlled substances laws and regulations

(FSMB of US, 1998)

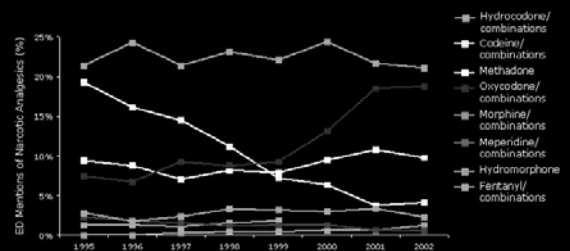
## Drug Abuse Warning Network (DAWN): Drug Diversion and Increasing Abuse

- Pain management practice may be at risk for attracting substance abusers, doctor shoppers, prescription forgers, and patient-dealers
- DAWN mentions of narcotic analgesics have doubled in the past 5 years:<sup>1</sup>



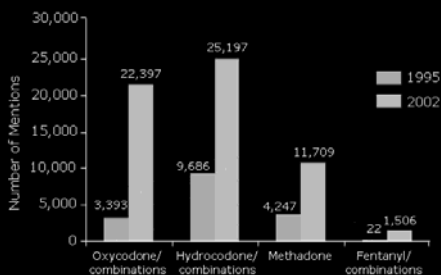
1. US Dept. of Health & Human Services/SAMHSA/OAS: Emergency Department Trends From the Drug Abuse Warning Network, 1995-2002, Table 2.8.0, Pub. D-24, July 2003.

## Percentage by Drug of Emergency Department Mentions of Narcotic Analgesics/Combinations in DAWN, by Year



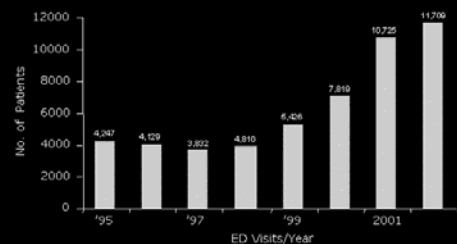
Source: Values derived from Emergency Department Trends From the Drug Abuse Warning Network, Final Estimates 1995-2002, DAWN Series D-24, DHHS Pub. No. SMA 03-3780, Rockville, Md, 2003.

## DAWN Emergency Department Trends 1995-2002



US Dept. of Health & Human Services/SAMHSA/OAS: Emergency Department Trends From the Drug Abuse Warning Network, 1995-2002, Table 2.8.0, Pub. D-24, July 2003.

## Methadone-Related ED Visits: Trend



- The number of methadone-related emergency room visits in the country has jumped in recent years

US Dept. of Health & Human Services/SAMHSA/OAS: Emergency Department Trends From the Drug Abuse Warning Network, 1995-2002, Table 2.8.0, Pub. D-24, July 2003.

## Conclusions

- Chronic pain is common and undertreated
- Identify chronic pain patients who would most likely benefit from opioid therapy and use it responsibly
- Implement opioid treatment with a plan for ongoing monitoring
- Assess and monitor pain, side effects, and drug-related behaviors
- Adjust dosage
- Manage side effects

## Conclusions

- **Misunderstandings about the use of opioids result in undertreatment of chronic pain**
- **Physicians, Physician Assistants, Nurse Practitioners, Pharmacists, and other prescribers must become better informed about issues of potential substance abuse**
- **Proper, effective use of opioids allows patients to lead productive lives with minimal risk of addiction or unsettling adverse effects**

## Questions

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