Inpatient Pain Management and the Role of the PA

Scott Petersen, PA-C
Cleveland Clinic Pain Management
April 12, 2013

Lecture Objectives:

- Briefly describe the scope of the problem with pain in the US.
- Explain my role as an inpatient pain management PA.
- Discuss pain management concepts/issues that I encounter on a regular basis.
- Provide some ideas and tools you may be able to use in your practice to help patients with pain.

The Definition of Pain

Pain

An unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage.

Note: The inability to communicate verbally does not negate the possibility that an individual is experiencing pain and is in need of appropriate pain-relieving treatment. Pain is always subjective. Each individual learns the application of the word through experiences related to injury in early life. Biologists recognize that those stimuli which cause pain are liable to damage tissue. Accordingly, pain is that experience we associate with actual or potential tissue damage. It is unquestionably a sensation in a part or parts of the body, but it is also always unpleasant and therefore also an emotional experience. Experiences which resemble pain but are not unpleasant, e.g., pricking, should not be called pain. Unpleasant abnormal experiences (dysesthesias) may also be pain but are not necessarily so because, subjectively, they may not have the usual sensory qualities of pain. Many people report pain in the absence of tissue damage or any likely pathophysiological cause; usually this happens for psychological reasons. There is usually no way to distinguish their experience from that due to tissue damage if we take the subjective report. If they regard their experience as pain, and if they report it in the same ways as pain caused by tissue damage, it should be accepted as pain. This definition avoids tying pain to the stimulus. Activity induced in the nociceptor and nociceptive pathways by a noxious stimulus is not pain, which is always a psychological state, even though we may well appreciate that pain most often has a proximate physical cause.

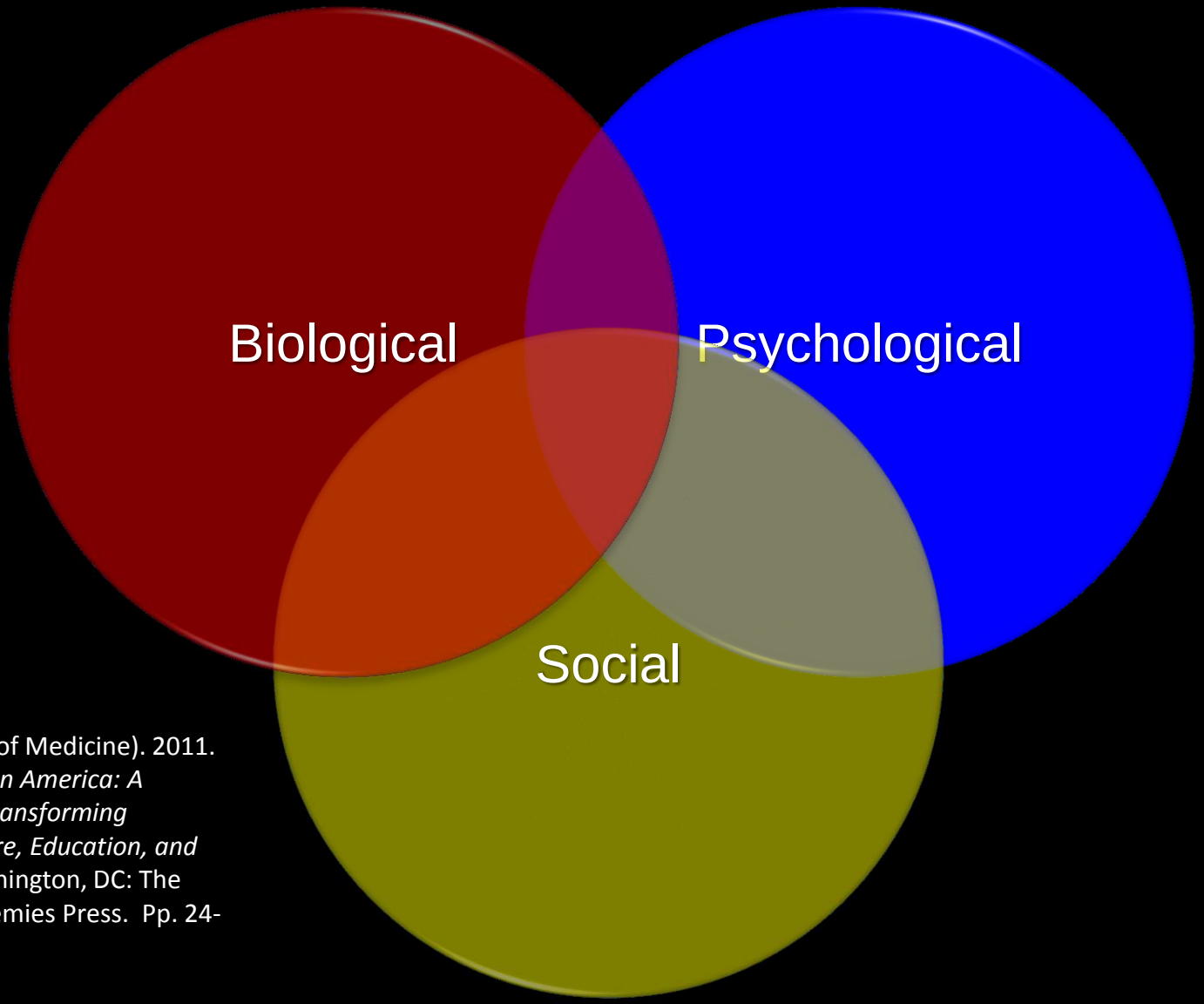
http://www.iasp-pain.org/Content/NavigationMenu/GeneralResourceLinks/PainDefinitions/default.htm

Acute vs. Chronic Pain

- Acute pain
  - Directly associated with an injury or illness
  - The onset of the pain is recent in relation to the injury or illness
  - Time-limited
  - Often resolves as the injury or illness resolves

- Chronic pain
  - Pain that persists for 3-6 months or longer
    - The timeframe is arbitrary
  - Sometimes associated with ongoing progressive tissue damage
  - Can also be present without detectable tissue damage

What Factors Influence Pain?



IOM (Institute of Medicine). 2011. *Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research*. Washington, DC: The National Academies Press. Pp. 24-25

What Factors Influence Pain?

- Biological
  - Severity of Illness or injury
  - Co-morbidities
  - Additional physical stressors

- Psychological
  - Depression
  - Anxiety
  - Other psychiatric illnesses
  - Anger
  - Fear that the pain represents something worse and that they are helpless against it

- Social
  - Support (or lack thereof) of significant others
  - Family attitudes and beliefs
  - Cultural beliefs
  - Access to medical care
  - Other community resources

IOM (Institute of Medicine). 2011. *Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research*. Washington, DC: The National Academies Press. Pp. 24-25

The Picture of Pain

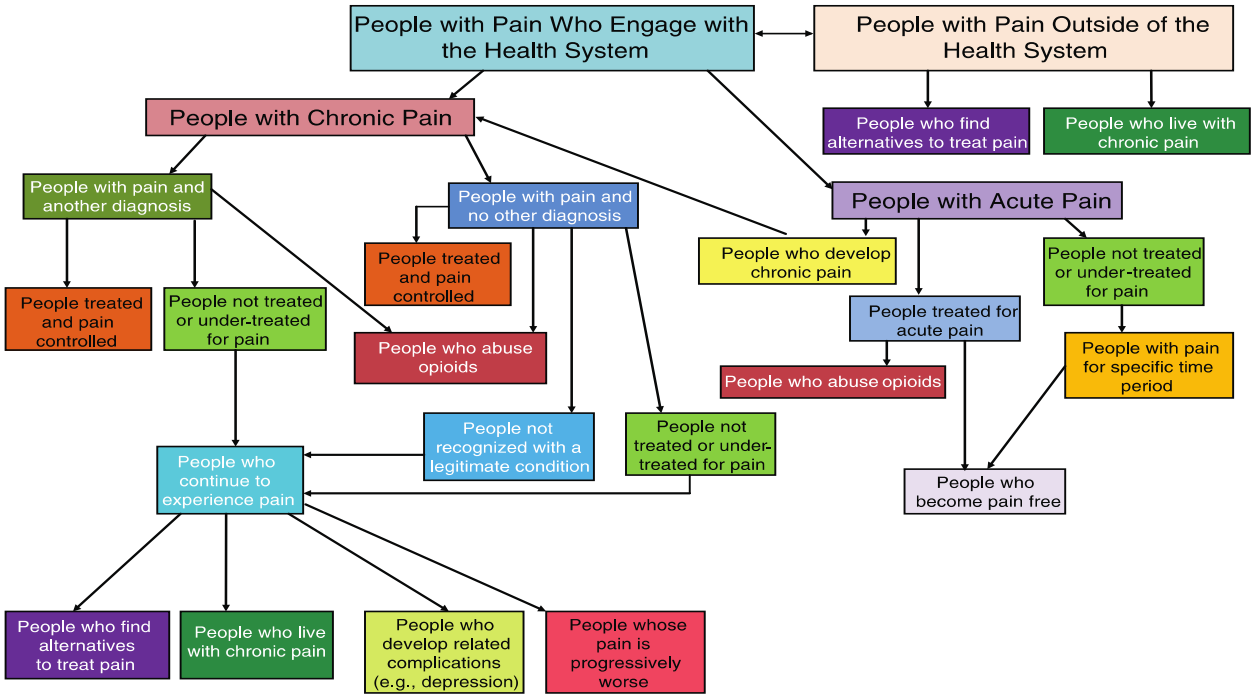


FIGURE 1-1 The picture of pain.
NOTE: People can move between and among these groupings and can be in more than one group simultaneously. Similar colors represent similar endpoints (e.g., for those within or outside the health system, or for those with chronic or acute pain).

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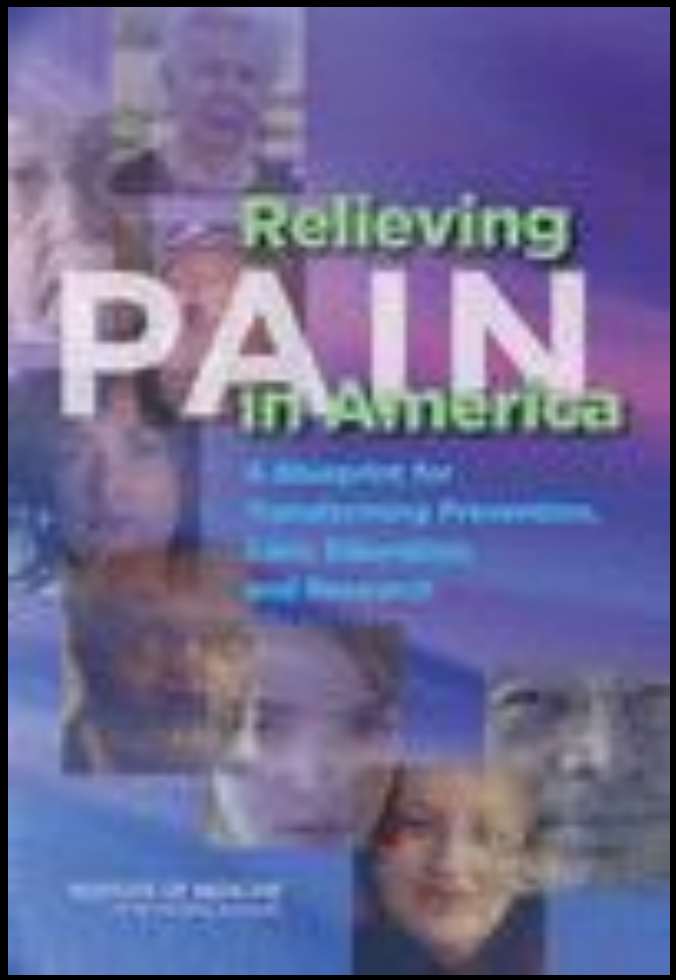
The Scope of the Problem

June 29, 2011 – The National Academies' Institute of Medicine releases their report, titled *Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research.* Among their findings:



Pain in the United States

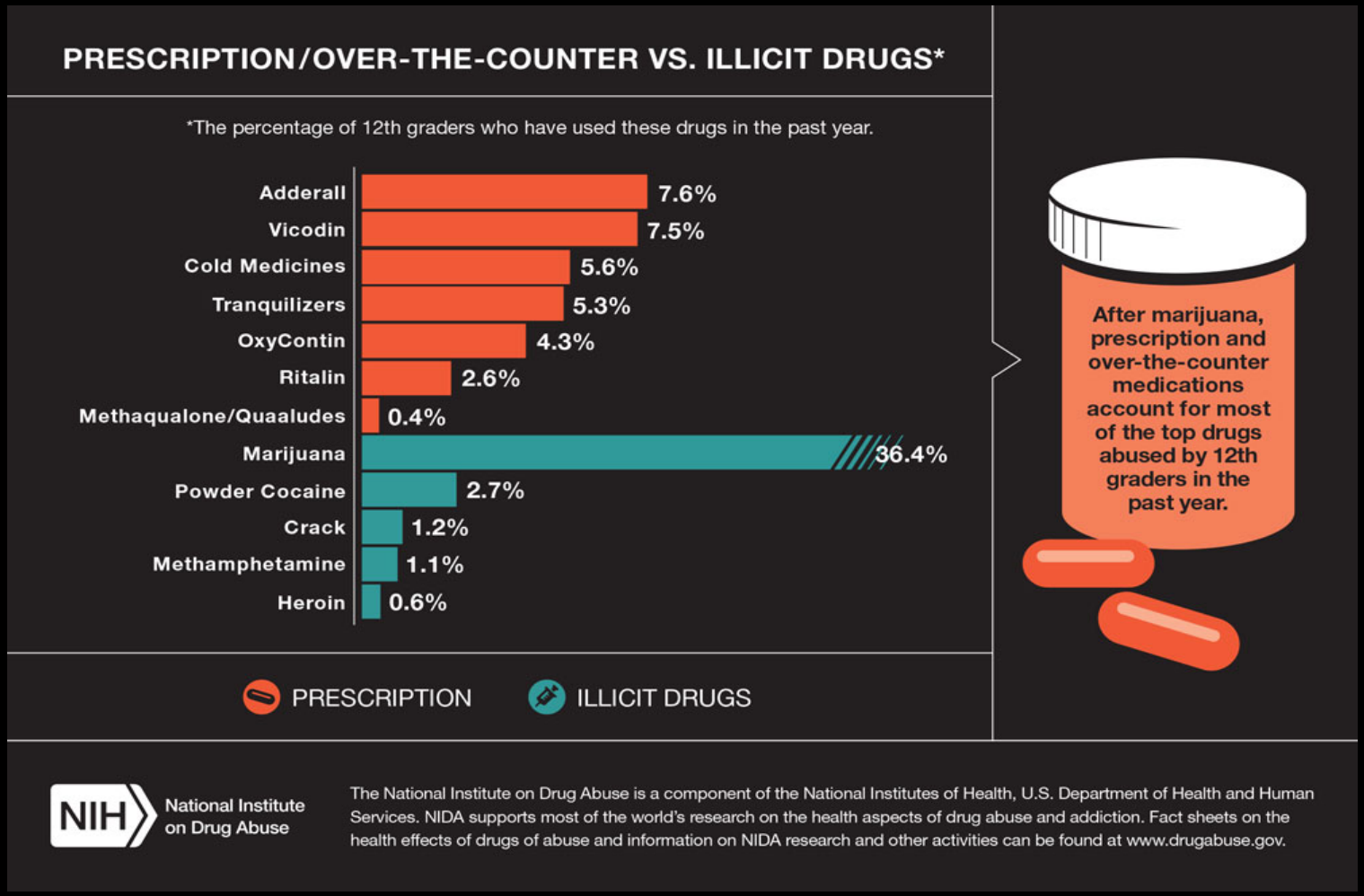
- In 2010, it was estimated that 100 million adults in the US sufferred from chronic pain issues at any given time
- This number will increase as:
  - The population ages
  - The prevalence of obesity increases
  - Our ability to save people with catastrophic injuries improves
  - People continue to have surgical procedures
  - More people are able to access the health care system

IOM (Institute of Medicine). 2011. *Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research*. Washington, DC: The National Academies Press. Pp. 62-63.

Pain in the United States

- The report identified particular populations at increased risk for chronic pain issues:
  - English as a second language
  - Race and ethnicity
    - African-Americans
    - Hispanics
    - Asian-Americans
    - American Indians/Alaskan Natives
  - Women
  - Children and the elderly
  - People living in rural areas
  - Military veterans
  - People with cognitive deficiencies
  - Surgical patients
  - Cancer patients
  - Patients at the end of life
  - (Not on the list – my observation) Patients with an established or perceived history of drug abuse or addiction

The “Flip Side of the Coin"



http://www.drugabuse.gov/related-topics/trends-statistics/infographics/monitoring-future-2012-survey-results

CDC Data

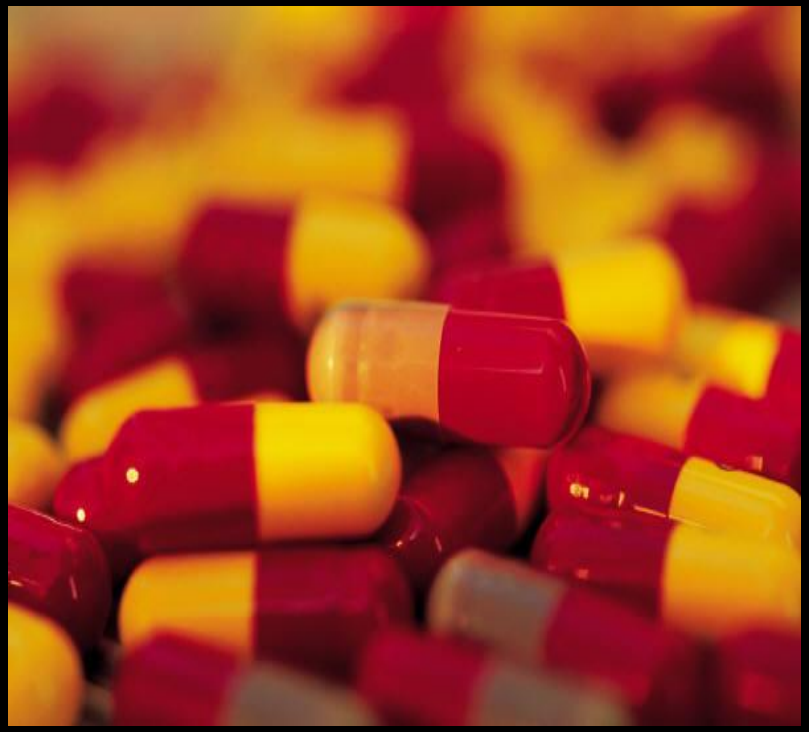
- “For every 1 overdose death from prescription painkillers, there are:
  - 10 treatment admissions for abuse
  - 32 ED visits for abuse or misuse
  - 130 people who abuse or are dependent
  - 825 people who take prescription painkillers for nonmedical use”

http://www.cdc.gov/injury/about/focus-rx.html

CDC Data

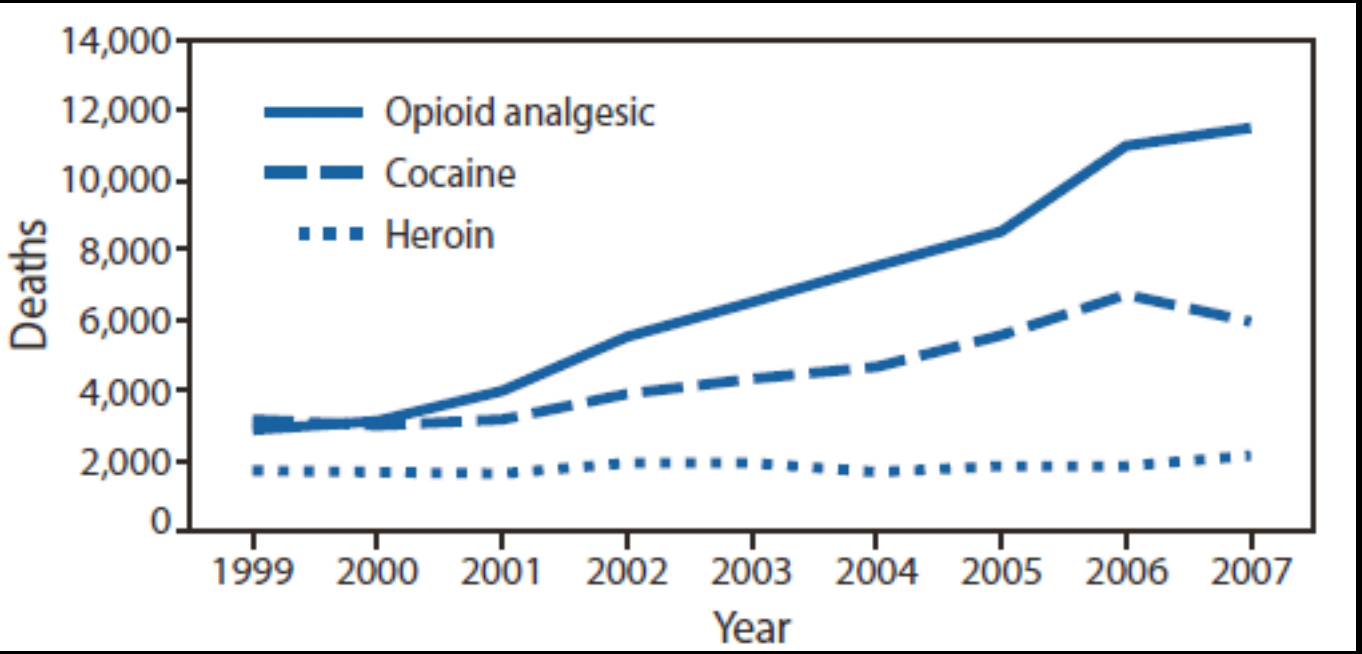
- “Overdoses of prescription painkillers (also called opioid or narcotic pain relievers) have more than tripled in the past 20 years, killing more than 15,500 people in the United States in 2009.”

- “Enough prescription painkillers were prescribed in 2010 to **medicate every American adult around-the-clock for one month**.”



http://www.cdc.gov/injury/about/focus-rx.html

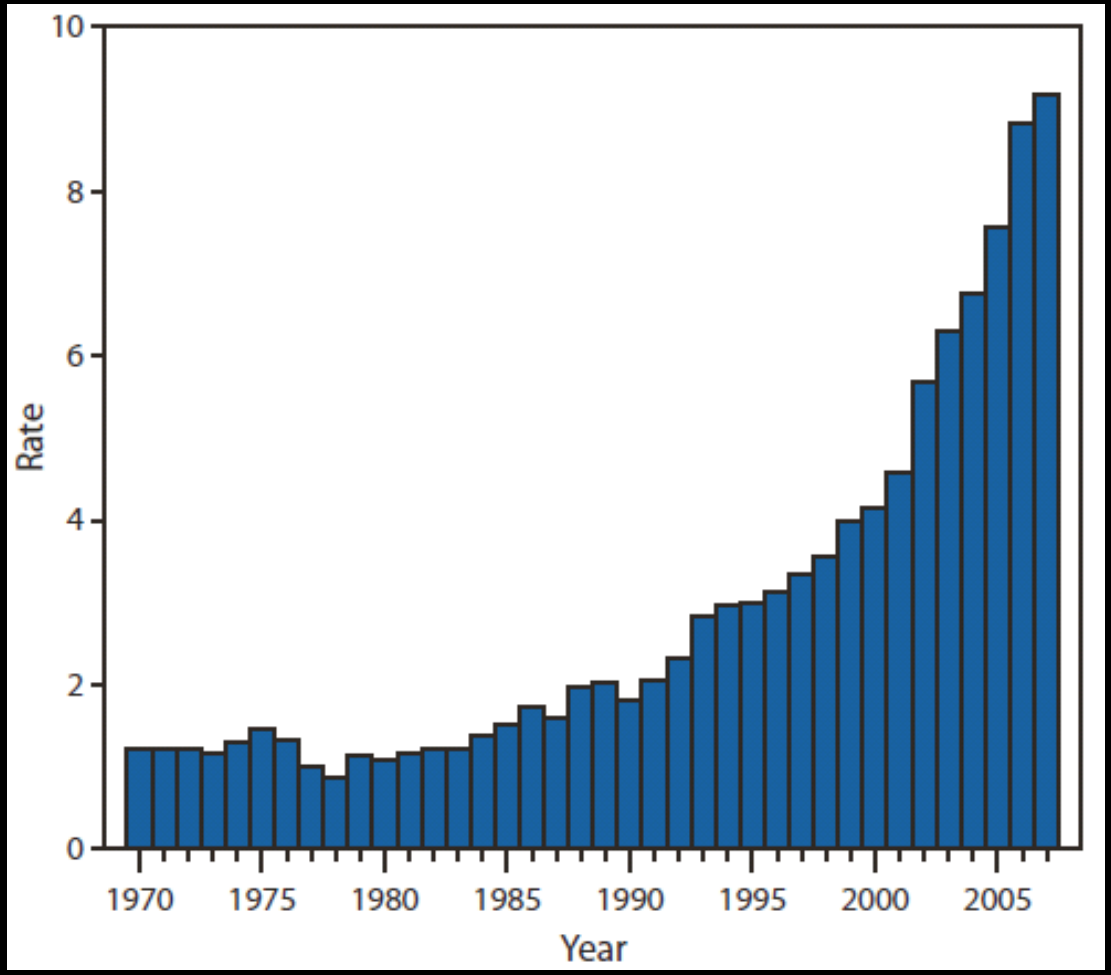
CDC Data



The figure above shows the number of unintentional drug overdose deaths involving opioid analgesics, cocaine, and heroin in the United States during 1999–2007. Since 2003, more overdose deaths have involved opioid analgesics than heroin and cocaine combined.

http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6101a3.htm?s_cid=mm6101a3_w

CDC Data



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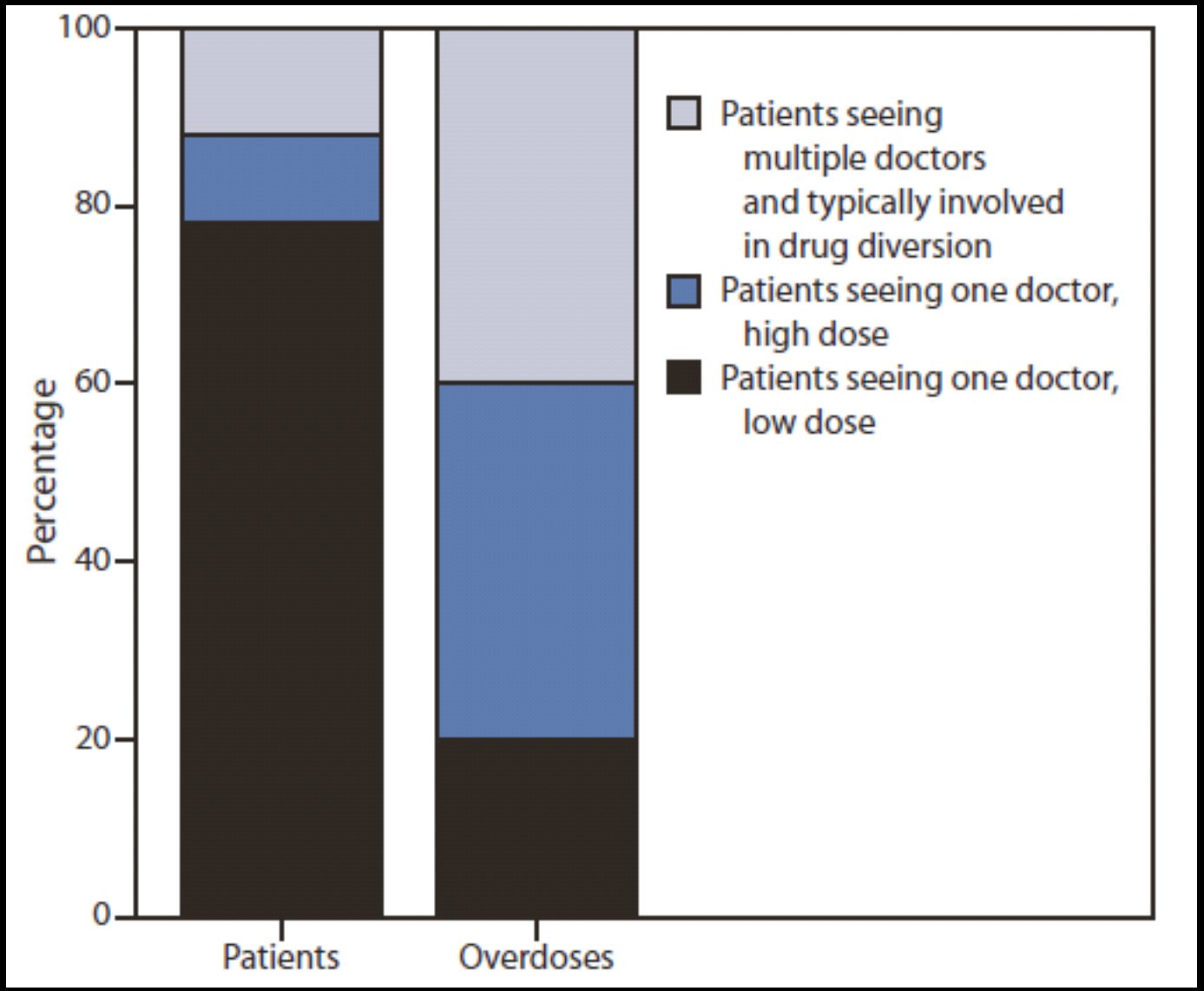
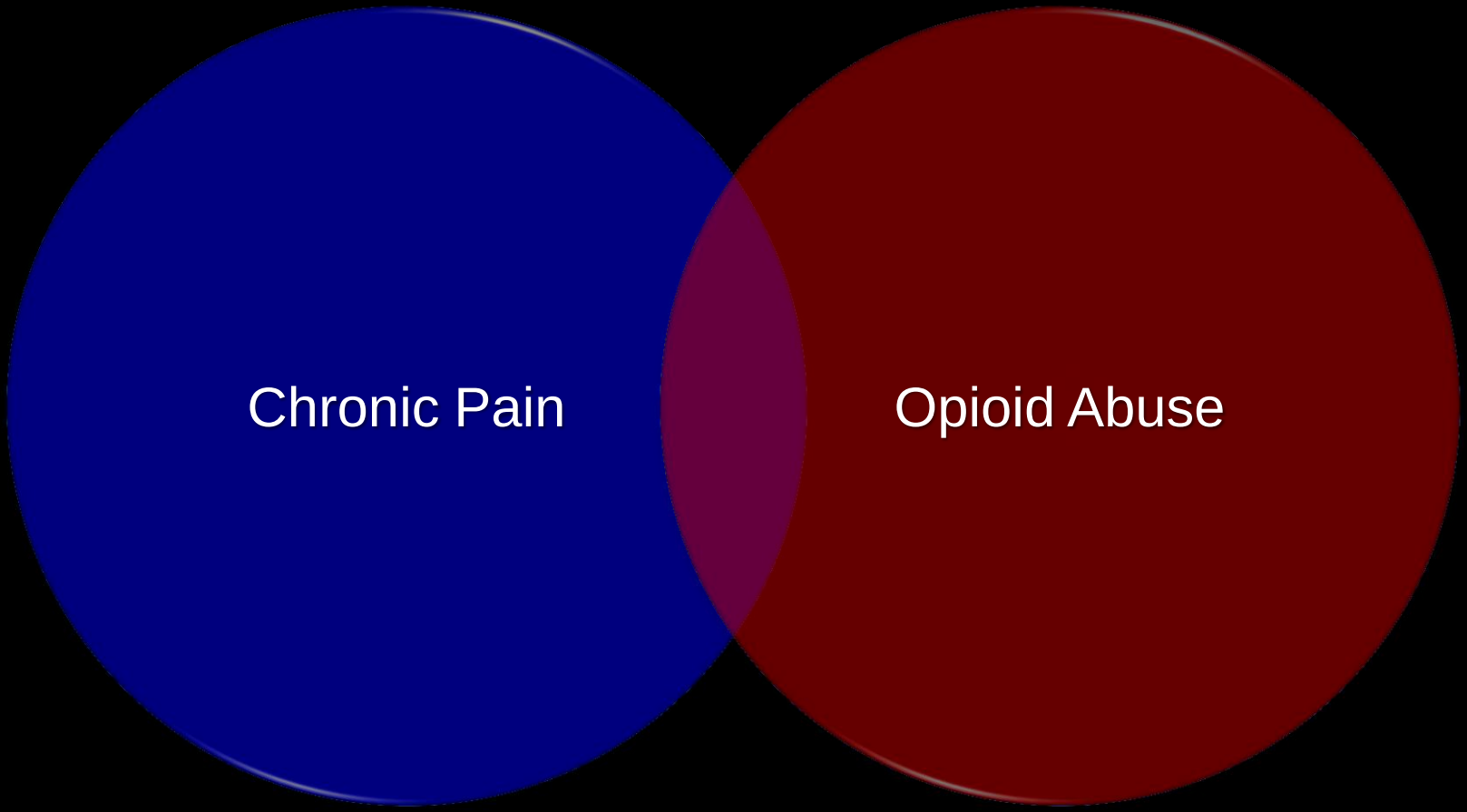
CDC Data


100
80
60
40
20
0
Percentage
Patients
Overdoses
Patients seeing multiple doctors and typically involved in drug diversion
Patients seeing one doctor, high dose
Patients seeing one doctor, low dose

2 Growing Populations



What I Do

- Inpatient pain management
- Employed by Cleveland Clinic Pain Management, a division of the Anesthesiology Institute
- Assigned to one hospital as my primary location with privileges at other hospitals to allow for cross-coverage
- Responsible for management of acute pain and chronic pain in selected patients in the inpatient setting
  - Acute pain: I am supervised by staff anesthesiologists
  - Chronic pain: I am supervised by Cleveland Clinic Pain Management staff physicians
- Responsible for pain management in all patient populations and all age groups admitted to the hospital, although the majority of my patients are adults

Fairview Hospital

- Cleveland Clinic – Western Region
- 517 licensed beds
- New ER/ICU under construction
- Teaching hospital
  - Surgery
  - Internal Medicine

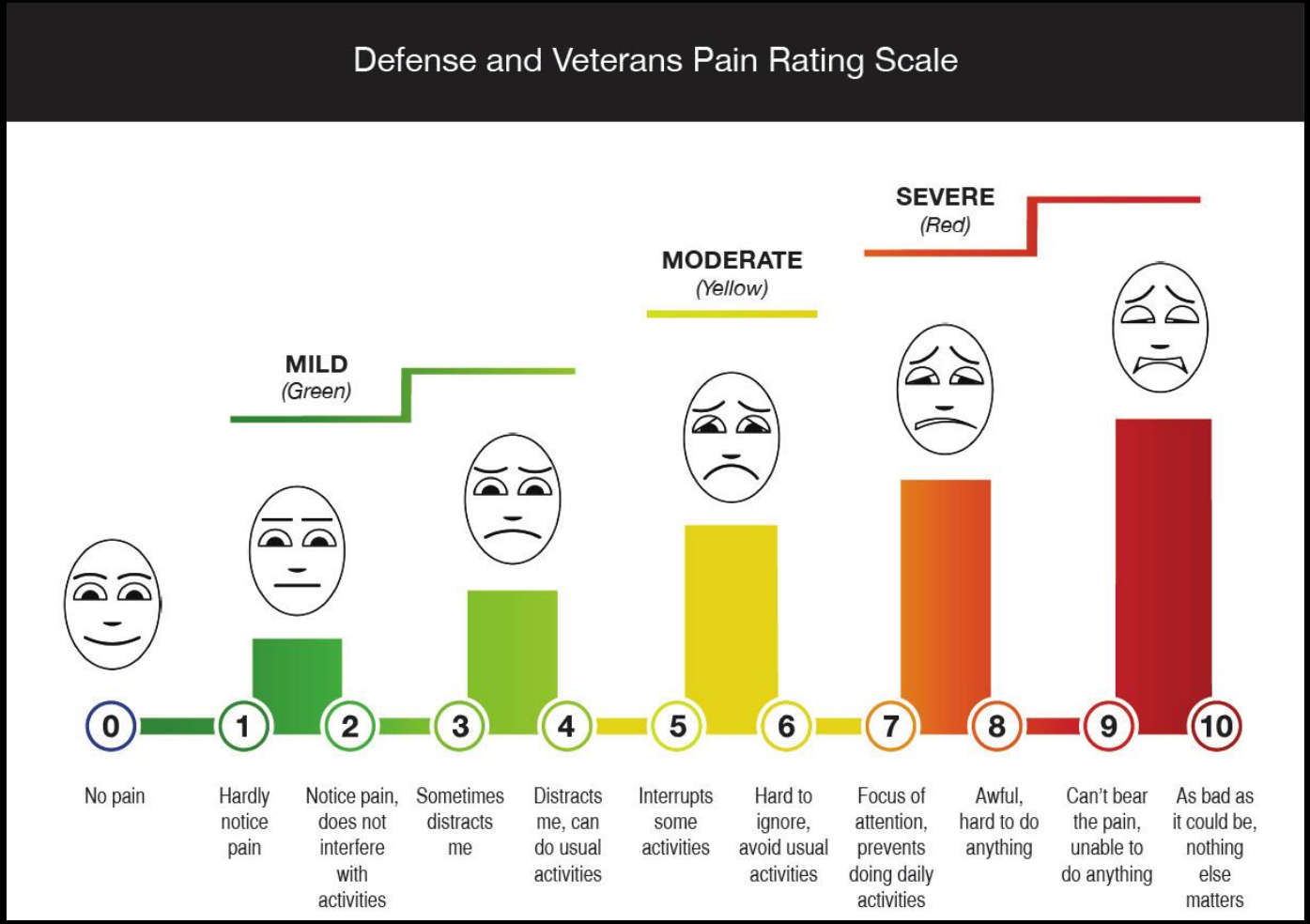
What I Do

- Initial evaluation of patients in pain when consulted
  - Thorough chart review
  - A basic pain history includes the following:
    - Onset/Origin of pain
      - When did it start?
      - What caused it?
    - Provocative/Palliative factors
      - What makes the pain worse?
      - What makes the pain better?
    - Quality of pain
      - What kind of pain is it? (Aching, stabbing, dull, etc.)
    - Region/Radiation of the pain
      - Where does it hurt?
      - Does the pain shoot or move anywhere?
    - Severity of the pain
      - On a 0-10 pain scale, what's your pain now? At its worst? At its best?
    - Timing of the pain
      - Does it hurt constantly? Sometimes? Only in certain situations?

The FACES Scale

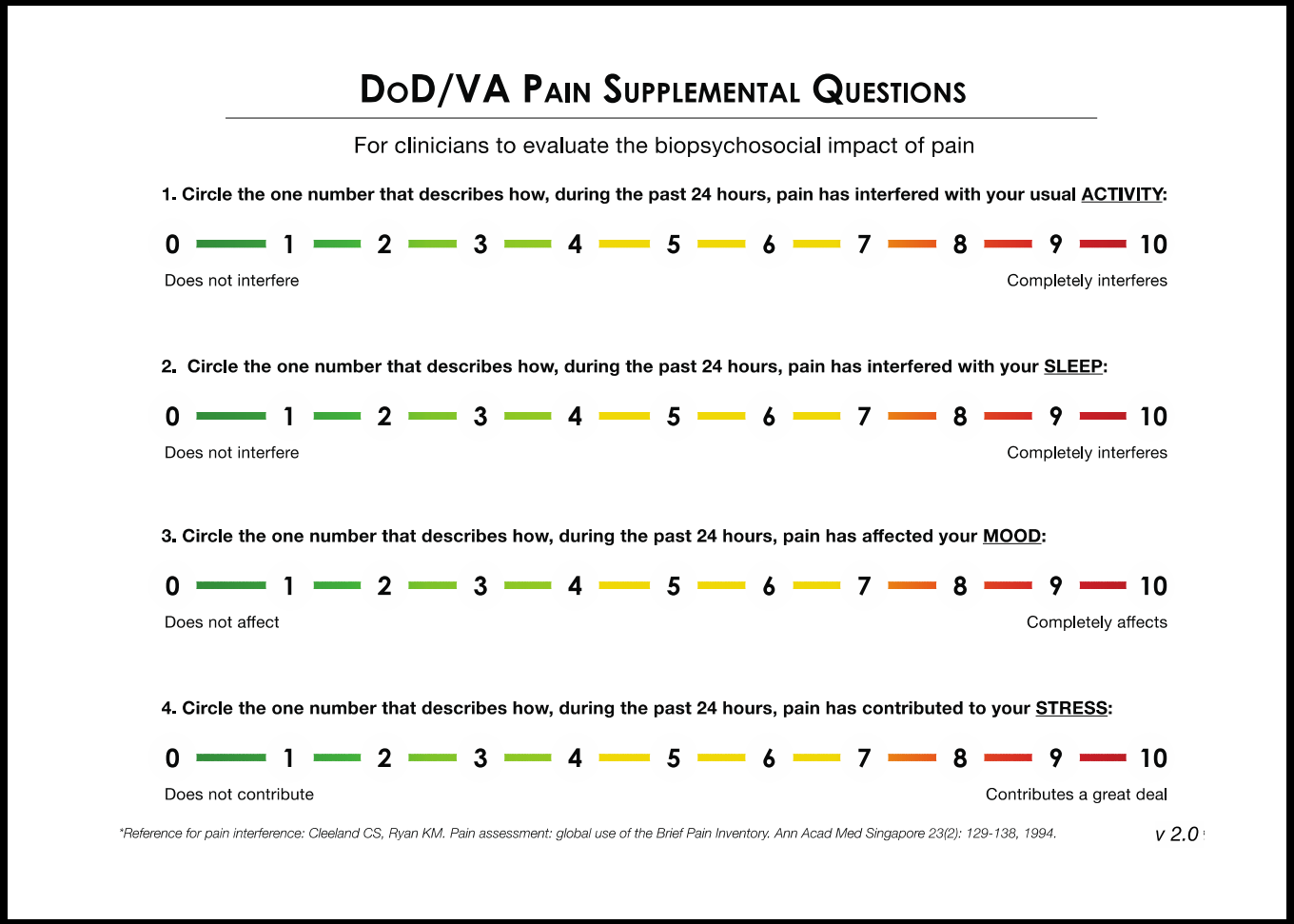
- Well recognized
- Initially developed by Dr. Donna Wong and Connie Baker to help children characterize their pain more effectively
- Is a 10/10 a 10/10 any more?
  - As an inpatient, what gets you medicated or gets your regimen changed?
  - Most patients with pain that would be rated 10/10 wouldn't be too interested in discussing it at that point.

The DVPRS



http://www.dvcipm.org/files/manuals-resources/dvprs.pdf

DVPRS Supplemental Questions



DoD/VA Pain Supplemental Questions

For clinicians to evaluate the biopsychosocial impact of pain

1. Circle the one number that describes how, during the past 24 hours, pain has interfered with your usual ACTIVITY:

0 — 1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9 — 10

Does not interfere — Completely interferes

2. Circle the one number that describes how, during the past 24 hours, pain has interfered with your SLEEP:

0 — 1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9 — 10

Does not interfere — Completely interferes

3. Circle the one number that describes how, during the past 24 hours, pain has affected your MOOD:

0 — 1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9 — 10

Does not affect — Completely affects

4. Circle the one number that describes how, during the past 24 hours, pain has contributed to your STRESS:

0 — 1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9 — 10

Does not contribute — Contributes a great deal

**Reference for pain interference: Cleeland CS, Ryan KM. Pain assessment: global use of the Brief Pain Inventory. Ann Acad Med Singapore 23(2): 129-138, 1994.*

v 2.0

http://www.dvcipm.org/files/manuals-resources/dvprs-supplemental-questions.pdf

What I Do

- Physical examination
  - Standard physical examination with more specific focus on the affected systems/areas of pain.
- Other factors I consider in my pain assessment:
  - Chronic pain history
    - What medications was the patient on as an outpatient?
    - Was the patient's outpatient regimen effective?
    - Are they on those medications as an inpatient?
    - If not, why not?
  - History of drug abuse/drug addiction
    - What drugs?
    - When was the last time the patient used? How much?
    - In recovery or treatment? Active in a 12-step program?
    - On maintenance medications?
      - Methadone
      - Buprenorphine/Naloxone
    - If not in treatment, interested in treatment?
  - Other co-morbidities

What I Do

- In patients with renal dysfunction…
  - Avoid morphine products if possible
  - Consider fentanyl instead
  - Dosing of Lyrica and gabapentin for neuropathic pain may need to be adjusted or even temporarily discontinued depending on the severity of the renal dysfunction
- Treatment considerations:
  - Patients on chronic pain regimens as an outpatient should be maintained on their home regimen as an inpatient as long as their condition allows.
    - Coordinate care with the patient's outpatient chronic pain physician
    - If acute pain states exist, they may need additional medication over and above their outpatient regimen
    - "If it isn't broken, don't fix it"
  - Use ALL of the tools at your disposal

Non-Opioid Analgesic Options

- Acetaminophen
  - We use the IV version frequently with post-operative patients until they can tolerate the PO version
  - Be mindful of the total daily dose of acetaminophen the patient receives from all medications, particularly combination medications such as oxycodone/acetaminophen and hydrocodone/acetaminophen
  - Maximum acetaminophen dose: 4000 mg/24 hours
  - The manufacturers of Tylenol (McNeil) changed their labeling in the fall of 2011 to a maximum dose of 3000 mg in 24 hours in an attempt to reduce the incidence of acetaminophen overdose
- NSAID's in appropriate patients
  - Avoid in (this iist is NOT COMPREHENSIVE):
    - Elderly patients
    - Patients with GI bleeding
    - Anticoagulated patients
    - Patients with renal impairment
    - Patients with NSAID allergies or NSAID-induced asthma

Non-Opioid Analgesic Options

- Regional anesthesia, if available
  - Local anesthetic (ropivacaine in our facility) continuous nerve block
  - Delivered through a “pain ball” (elastomeric pump) – delivers a slow, steady flow of local anesthetic at the nerve site
  - Opioid-sparing therapy
  - No electronic components to the pump –patient can go to MRIwith the apparatus in place if needed
    - Except for the carrying bag – metal zipper
  - Patients can go home from some same-day surgeries with these in place and remove the catheters themselves with a little training
    - We follow up with patients sent home with catheters in place via telephone daily
  - Monitor your orthopedic cases on the floors with these in place – watch for limb numbness and weakness
- Intrathecal morphine
  - High incidence of nausea, vomiting, pruritis post-operatively
  - Improved pain control for 24-30 hours post-procedure
- Other pre-emptive blocks (TAP blocks, etc)
  - Longer-acting local anesthetics (Exparel) now available

Patient Controlled Analgesia

- IVPCA and epidural PCA management
  - PCA = Patient Controlled Analgesia
  - Delivered intravenously or via epidural catheter
  - Patient selection for PCA use:
    - Coherent: PCA's are inappropriate for sedated or obtunded patients
    - Competent: Can the patient understand how the PCA works?
    - Capable: Can the patient press the button?
    - Communicative: Can the patient communicate with staff to advise them about side effects, efficacy?

Patient Controlled Analgesia

- Do not routinely include a basal rate on an IVPCA
  - No indication that basal rates improve overall pain control
  - Increased incidence of :
    - Nausea/vomiting
    - Constipation
    - Pruritis
    - Respiratory depression
  - EXCEPTION: Patients on chronic pain medication may require a basal rate
    - If a basal rate is included, it should only represent 50-75% of the patient's daily outpatient chronic opioid consumption
- No more than 50% of a patient's total daily IVPCA use should come from the basal rate – if the basal rate makes up >50% of the total daily medication use, lower or D/C the basal rate

What Patients Should Know About PCA

- Rule #1: THE PATIENT IS THE ONLY ONE ALLOWED TO PRESS THE IVPCA BUTTON!
- Rule #2: THE PATIENT IS THE ONLY ONE ALLOWED TO PRESS THE IVPCA BUTTON!
- Rule #3: THE PATIENT IS THE ONLY ONE ALLOWED TO PRESS THE IVPCA BUTTON!

(GET THE PICTURE?)

What Patients Should Know About PCA

- If the patient is the only one pressing the IVPCA button they cannot overdose unless they figure out how to reprogram the machine
  - Patients can and do figure out how to reprogram the machine
- Well-meaning loved ones can inadvertently overdose a patient
  - “They were asleep – I didn’t want them to wake up in pain.”
  - “He/She was moaning/thrashing/grimacing in their sleep – it was obvious that he/she was in pain.”

What Patients Should Know About PCA

- The medications in an IVPCA may cause:
  - Nausea/Vomiting
  - Pruritis
  - Constipation
  - Fine rash
- Patients should not wait until their pain is a 9-10/10 before using the IVPCA. It takes more resources and a longer time to get pain under control if patients wait until their pain is unbearable

What Patients Should Know About PCA

- Patients should use their button prior to starting therapy, ambulating, or any activity that may exacerbate their pain
- A patient's pain will most likely NOT be 0/10 while on an IVPCA – our goal is usually $\leq$ 4/10
- Medications for pruritus, nausea, and constipation can and should be requested as needed

Daily Management of Patients

- Monitoring the "Four A's"
  - Analgesia
    - How well are our interventions working?
    - What's the patient's pain score at rest? During activity?
  - Activities of Daily Living
    - Or Advances in Activity as an inpatient
    - Is the patient progressing in activity on schedule?
    - Are they able to do everything they need to do to get better?
      - Ambulation, therapy, etc.
  - Adverse effects:
    - Are medication side effects present? Are they controlled with adjunct medications?
    - Are there any adverse effects that necessitate a change in regimen?
  - Aberrant behaviors
    - Taking medications from home illicitly
    - Tobacco/alcohol use as an inpatient
    - Illicit drug use as an inpatient

Opioid Side Effects

- All opioids can cause:
  - Constipation
    - Colace is not enough – patients on opioids should also have orders for a stimulant laxative of some sort (senna, Milk of Magnesia, Miralax)
  - Nausea/vomiting
  - Sedation/changes in mentation
  - Respiratory depression
  - Pruritus
  - Myoclonus
- Therefore, patients on opioids also need orders for:
  - A bowel regimen
  - Antipruritics
  - Antiemetics

Inpatient Pain Management in the Patient with Opioid Addiction

- First of all, are the patients ADDICTED?
- The short definition of addiction (American Society of Addiction Medicine):

"Addiction is a primary, chronic disease of brain reward, motivation, memory and related circuitry. Dysfunction in these circuits leads to characteristic biological, psychological, social and spiritual manifestations. This is reflected in an individual pathologically pursuing reward and/or relief by substance use and other behaviors.

Addiction is characterized by inability to consistently abstain, impairment in behavioral control, craving, diminished recognition of significant problems with one's behaviors and interpersonal relationships, and a dysfunctional emotional response. Like other chronic diseases, addiction often involves cycles of relapse and remission. Without treatment or engagement in recovery activities, addiction is progressive and can result in disability or premature death."

http://www.asam.org/research-treatment/definition-of-addiction; Accessed 3/24/2013

Inpatient Pain Management in the Patient with Opioid Addiction

- Patients with pain on chronic opioid medications are not necessarily addicted!
  - They may physically dependent, and sudden cessation of their medications may precipitate withdrawal symptoms, but PHYSICAL DEPENDENCE DOES NOT EQUAL ADDICTION!
- This is one of those labels that can end up in a patient's chart incorrectly and really cause them a lot of problems in the future, especially if they have chronic pain issues.
- Don't assume that patients on methadone have an addiction issue – methadone is used regularly in the management of chronic pain conditions
- If you don't know, ask. Most patients receiving treatment for addiction are quite honest and forthcoming with information. They want to get better!
- If you still don't know, consult an Addiction Medicine or Psychiatry specialist to evaluate the patient

Inpatient Pain Management in the Patient with Opioid Addiction

- Patients with drug abuse/addiction issues should not be denied opioid medications for pain management. Instead, their treatment should be tailored to their immediate needs and planned so as to account for the co-existing addiction issues.
  - These patients may need more opioids to treat their pain
  - These patients may not WANT opioids if they're in recovery for fear of relapse
- Prior to interviewing these patients, I do a thorough chart review and run an OARRS report
- Ask questions in a non-judgmental fashion
  - Drugs of abuse
  - How much is the patient using daily?
  - When was the last time they used?
  - Are they experiencing any withdrawal symptoms?

Inpatient Pain Management in the Patient with Opioid Addiction

- Management strategies
  - Team effort – I get a Psychiatry or Addiction Medicine consultation for assistance
  - Adjust opioid dosing to accommodate for the patient's baseline daily use as is possible
  - Patients on buprenorphine may benefit from splitting their once- or twice-daily dosing into smaller, more frequent doses to improve analgesia
    - I never do this without consulting the patient's Addiction Medicine provider and I follow their recommendations to the letter
  - Patients on methadone should be maintained on their daily methadone dose with additional short-acting opioids for analgesia
  - Consider the use of the opioid-sparing modalities discussed previously, especially regional anesthesia and IV acetaminophen

Outpatient Pain Management

- Pain Management is NOT synonymous with opioid prescription!
- Effective pain management is multidisciplinary and addresses all of the aspects of pain presentation we discussed earlier:
  - Interventional procedures
  - Physical/occupational therapy
  - Mental health evaluation/counseling
  - Treatment of co-morbidities
    - Weight reduction
    - Smoking cessation
  - Regular monitoring
    - OARRS
    - Urine drug screens
      - These days, the dipstick isn't enough
      - May not pick up semi-synthetic opioids like oxycodone or synthetic opioids like fentanyl
      - Make sure you understand the capabilities of the test you use in the office!
  - Screening for addiction
  - Medication management

Outpatient Pain Management

- Some patients aren't good candidates for opioid medications
  - History of drug and/or alcohol use
  - Lack of health literacy
  - Patients unwilling to participate in all aspects of their pain treatment
- Patients need to do everything possible to improve their pain control and quality of life
  - Patients who present for medication refills without fail but do not participate in other aspects of their care (therapy, counseling, smoking cessation) aren't doing everything they can to get better
- Get Pain Management professionals involved early, even if it's just for consultation and recommendations for a treatment plan
- Document, document, document!
  - Do NOT prescribe opioids without having access to OARRS and USING IT.
  - While you cannot duplicate an OARRS report in an EMR or place the actual hard copy in the chart, always summarize the findings of your OARRS review in the documentation

Outpatient Pain Management

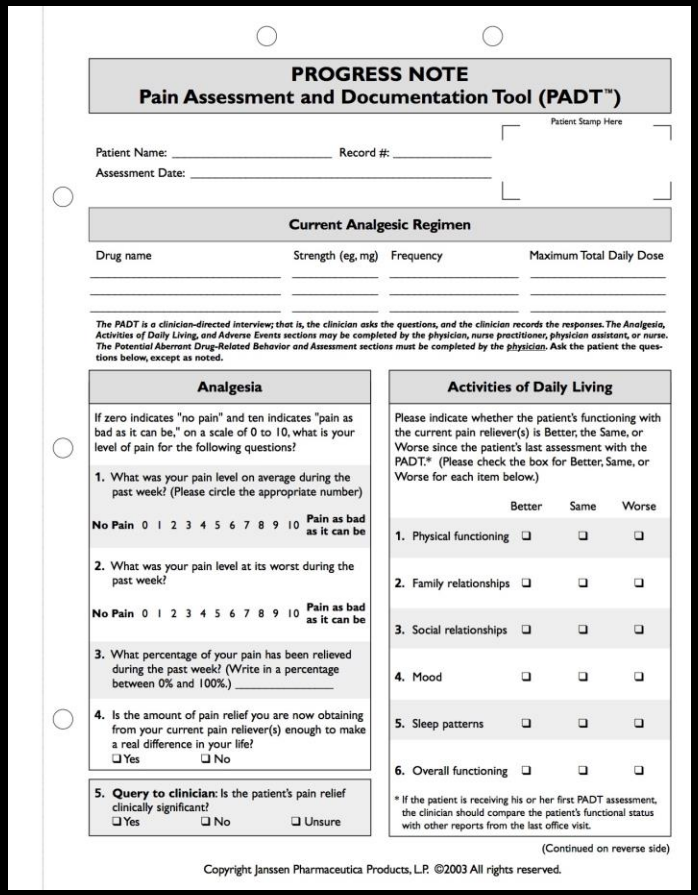
- Document the “Four A’s” every time you see a patient to whom you’re prescribing analgesics
  - For review:
    - Analgesia
    - Activities of Daily Living
    - Adverse Effects
    - Aberrant Behaviors
- If your practice doesn’t have a template for pain documentation, there are a number of these online that are free for use in your practice
- I like the Pain Assessment and Documentation Tool (PADT)
- Available at:

http://www.emergingsolutionsinpain.com/content/tools/toolkit_2008/data/documents/PADT_PainAssessment_Documentation.pdf

- May need to register at the site first: http://www.emergingsolutionsinpain.com

Pain Assessment and Documentation Tool (PADT)

- Available online
- Can be reproduced
- Accompanying guidebook explaining its use online at the same site
- Guidebook notes that the PADT is designed to “compliment – not replace – your primary progress note”
- Two pages (page 1 shown here)



PROGRESS NOTE
Pain Assessment and Documentation Tool (PADT™)

Patient Stamp Here

Patient Name: _____ Record #: _____

Assessment Date: _____

Current Analgesic Regimen

Drug name	Strength (eg, mg)	Frequency	Maximum Total Daily Dose

The PADT is a clinician-directed interview; that is, the clinician asks the questions, and the clinician records the responses. The Analgesia, Activities of Daily Living, and Adverse Events sections may be completed by the physician, nurse practitioner, physician assistant, or nurse. The Potential Aberrant Drug-Related Behavior and Assessment sections must be completed by the physician. **Ask the patient the questions below, except as noted.**

Analgesia

If zero indicates "no pain" and ten indicates "pain as bad as it can be," on a scale of 0 to 10, what is your level of pain for the following questions?

1. What was your pain level on average during the past week? (Please circle the appropriate number)

No Pain 0 1 2 3 4 5 6 7 8 9 10 **Pain as bad as it can be**

2. What was your pain level at its worst during the past week?

No Pain 0 1 2 3 4 5 6 7 8 9 10 **Pain as bad as it can be**

3. What percentage of your pain has been relieved during the past week? (Write in a percentage between 0% and 100%.) _____

4. Is the amount of pain relief you are now obtaining from your current pain reliever(s) enough to make a real difference in your life?
❑ Yes ❑ No

5. **Query to clinician:** Is the patient's pain relief clinically significant?
❑ Yes ❑ No ❑ Unsure

Activities of Daily Living

Please indicate whether the patient's functioning with the current pain reliever(s) is Better, the Same, or Worse since the patient's last assessment with the PADT.* (Please check the box for Better, Same, or Worse for each item below.)

	Better	Same	Worse
1. Physical functioning	❑	❑	❑
2. Family relationships	❑	❑	❑
3. Social relationships	❑	❑	❑
4. Mood	❑	❑	❑
5. Sleep patterns	❑	❑	❑
6. Overall functioning	❑	❑	❑

* If the patient is receiving his or her first PADT assessment, the clinician should compare the patient's functional status with other reports from the last office visit.

(Continued on reverse side)

Outpatient Pain Management

- One last recommendation:
- Gourlay, D. L. et al. (2005), Universal Precautions in Pain Medicine: A Rational Approach to the Treatment of Chronic Pain. *Pain Medicine*, 6(2): 107-112.
- An article that outlines "The Ten Steps of Universal Precautions in Pain Medicine"
  - Make a Diagnosis with Appropriate Differential
  - Psychological Assessment Including Risk of Addictive Disorders
  - Informed Consent
  - Treatment Agreement
  - Pre- and Post-Intervention Assessment of Pain Level and Function
  - Appropriate Trial of Opioid Therapy +/- Adjunctive Medications
  - Reassessment of Pain Score and Level of Function
  - Regularly Assess the "Four A's" of Pain Medicine
  - Periodically Review Pain Diagnosis and Comorbid Conditions, Including Addictive Disorders
  - Documentation

Thank You!

Questions?