



American Society of Hematology

Helping hematologists conquer blood diseases worldwide

You Can't Get the Right Results With the Wrong System

Some Thoughts on “The High Utilizing Patient” and “Addiction”

C. Patrick Carroll, MD

Director of Psychiatric Services

Sickle Cell Center for Adults

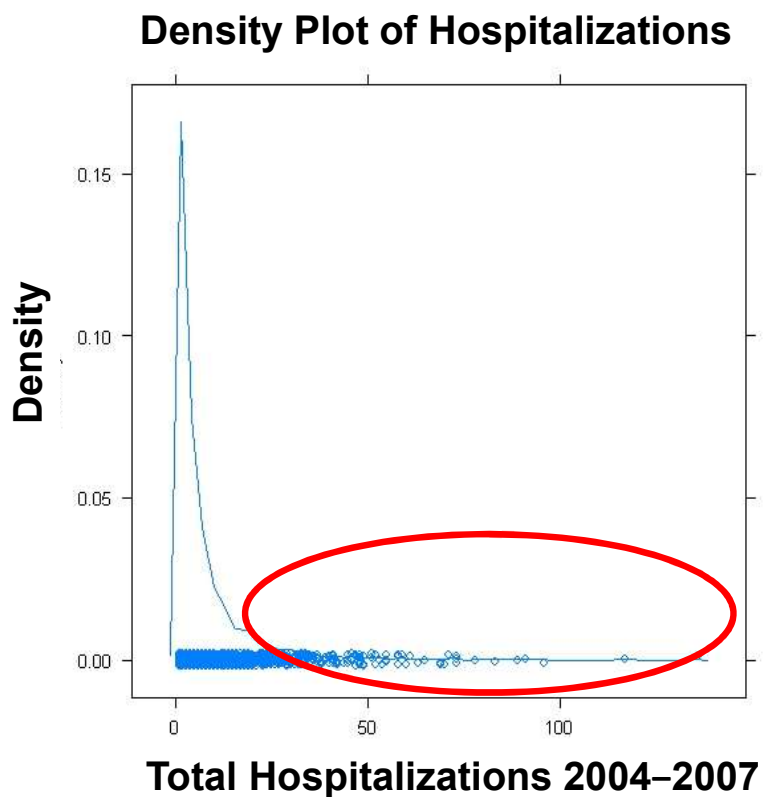
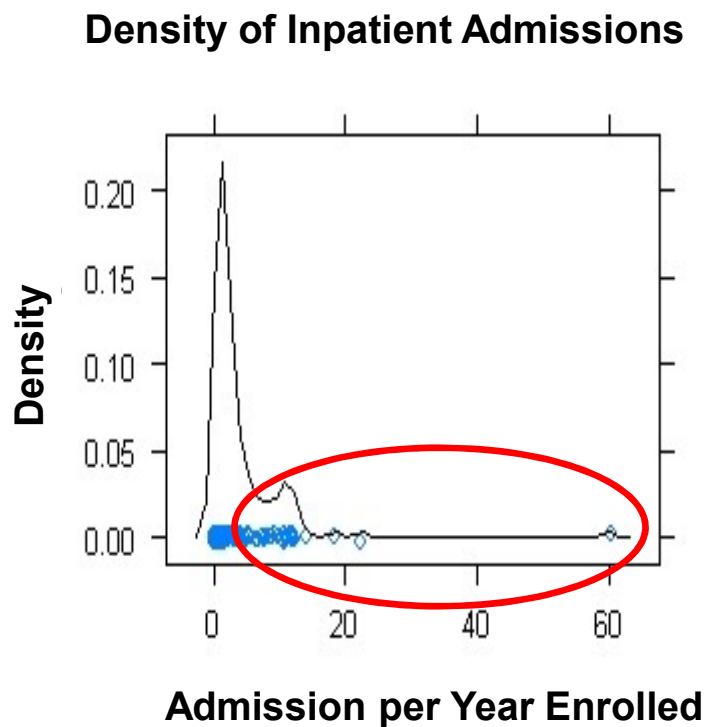
Johns Hopkins Hospital

Disclosures

No relevant disclosures



The Utilization Paradox of SCD



Carroll, Haywood, Fagan, and Lanzkron, . *American Journal of Hematology* 2009 84(10):666-670

Carroll, Haywood, and Lanzkron. *Journal of Hospital Medicine*. In Press.



American Society of Hematology

A Consult*

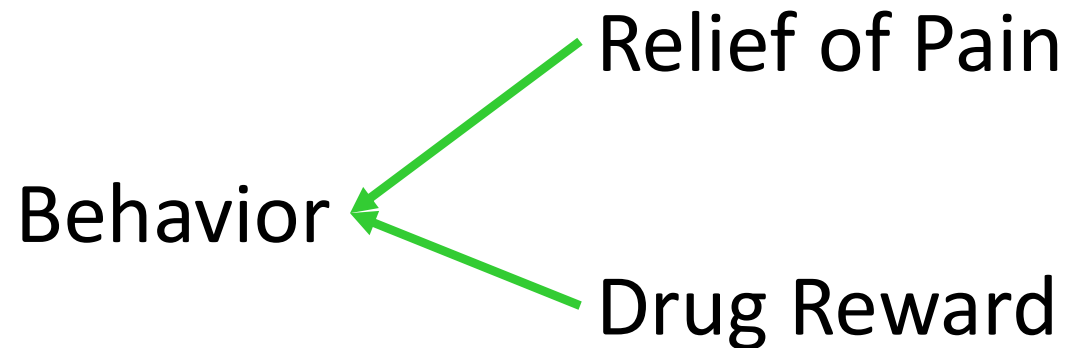
- Very frequent visits to multiple hospitals, reports 7-10/10 pain, often abdominal or in sites of AVN
 - (>1 visit or hospital day per three days)
- He lies. A lot.
- Seen by psychiatry inpatient and out-, diagnosed with a particular developmental disorder but “with no specific recommendations.” Occasionally suspected of depression.
- Specific question: “Is this OUD?”
- When I see him, he’s...pleasant. And very anxious about pain.
- (He’s probably not taking his HU right)

AVN, avascular necrosis; OUD, opioid use disorder; HU, hydroxyurea

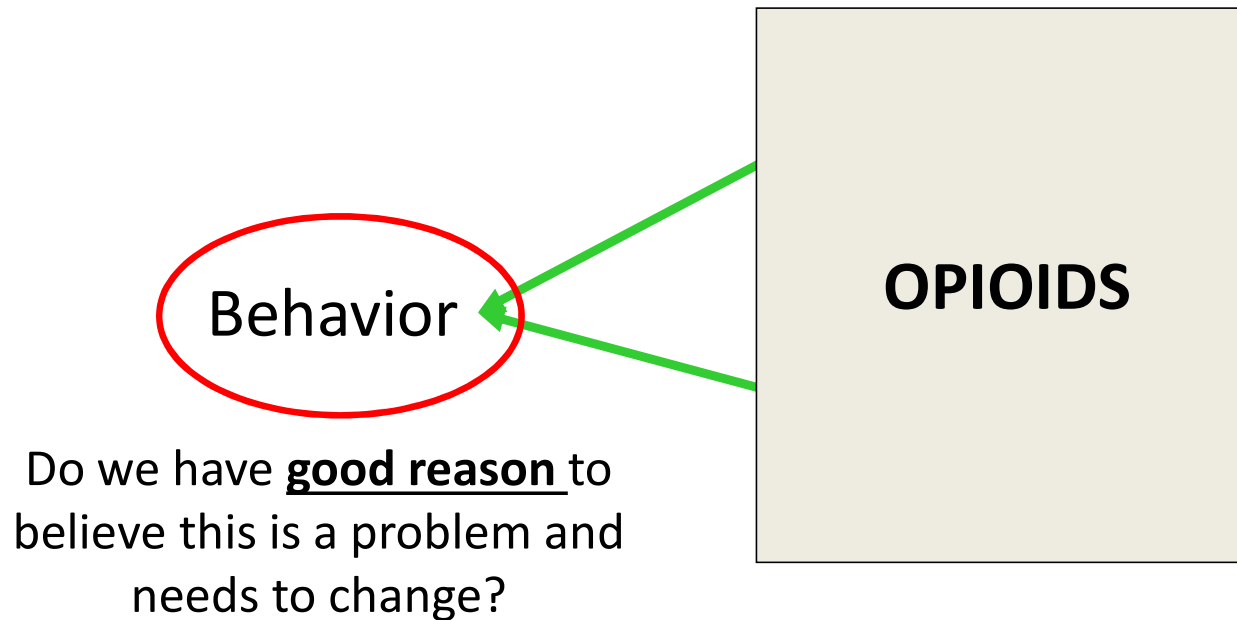
*which never works



Addiction and “Pseudo-addiction”



Maybe We Should Stick With What We Can See



Principles of Behavior Change: ABCs

- **Elements**

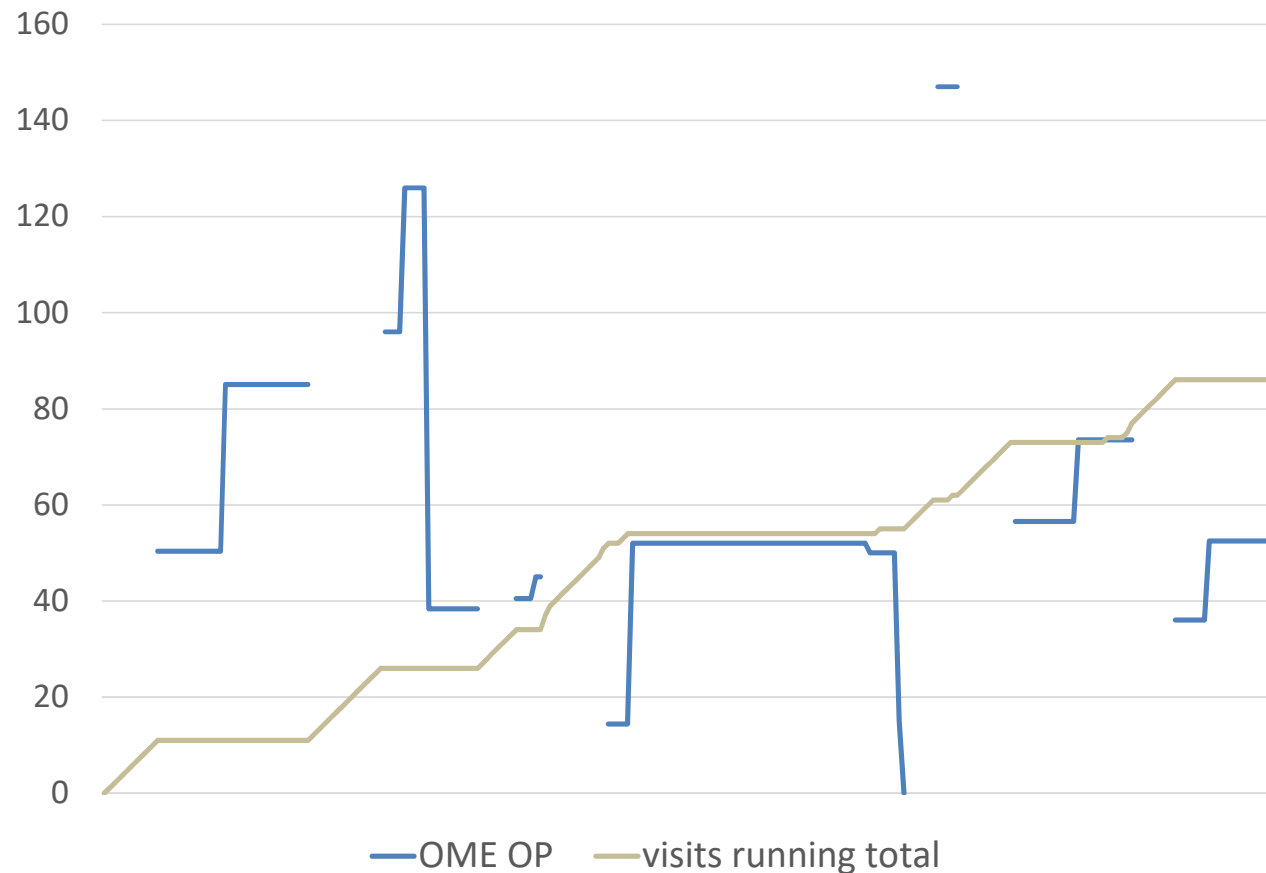
- Antecedents: Things that reliably happen prior to the behavior – “triggers,” contexts
- **Behaviors**: Verifiable, countable (in principle) things people do
- **Consequences** (or Contingencies): What happens immediately after the behavior?

- **Application**

- **Extinction**: Stop reinforcing the behavior
 - It also helps to increase the work of the undesirable pattern
- **Substitution**: Start reinforcing successive approximations of the desired behavior
 - Reduce the difficulty of desired behaviors
 - Make reinforcement as easy and frequent as you can to start
- Reduce predictable antecedents to the target behavior; or better yet pair them with the new behavior



Outpatient Opioids and Visits



He's actually
NOT in the
hospital all
the time.

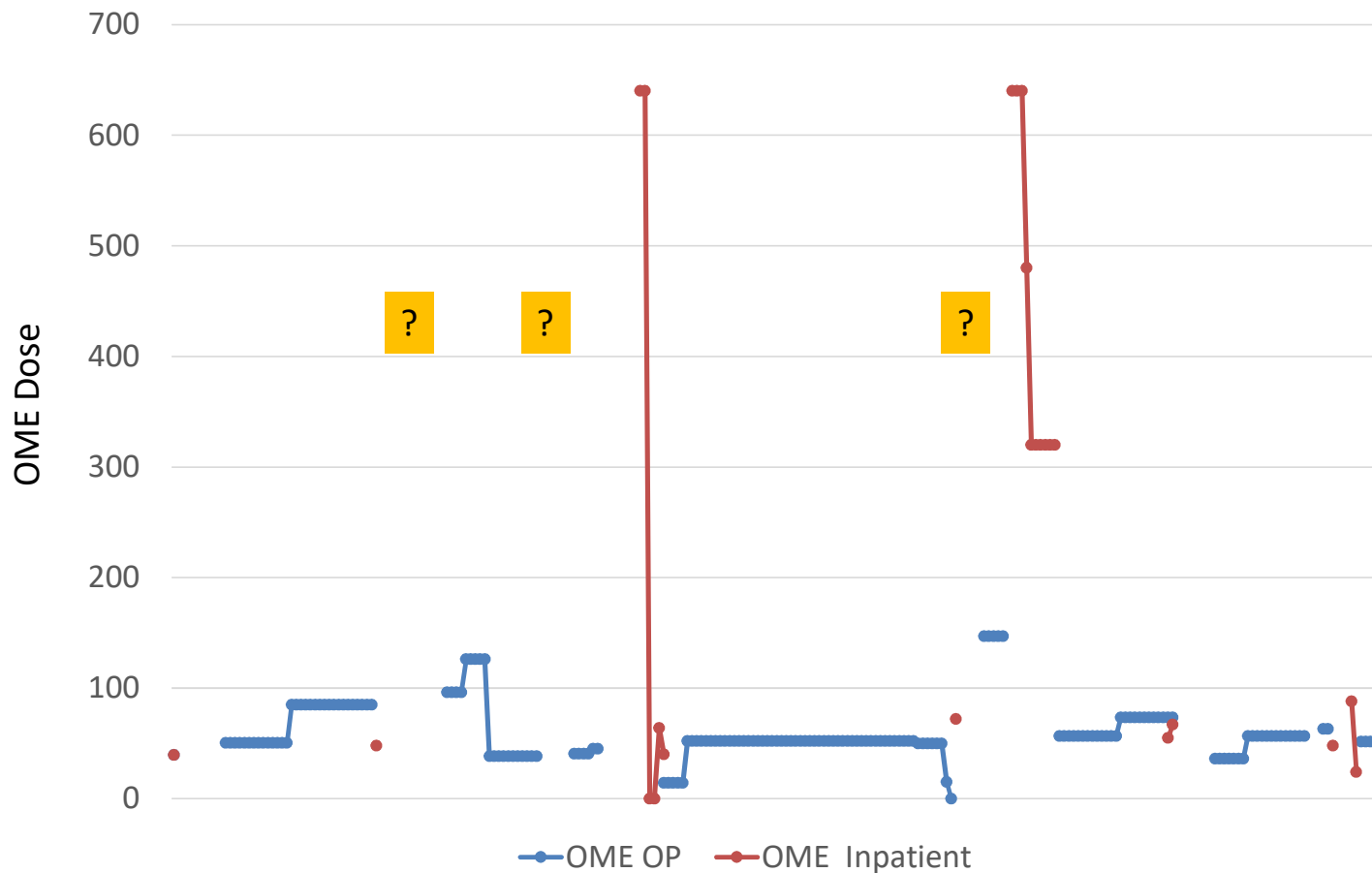
(But he still manages to
have ~1 visit/hospital day
per three days.)

OME, oral morphine equivalent; OP, outpatient



American Society of Hematology

Opioid Dosing



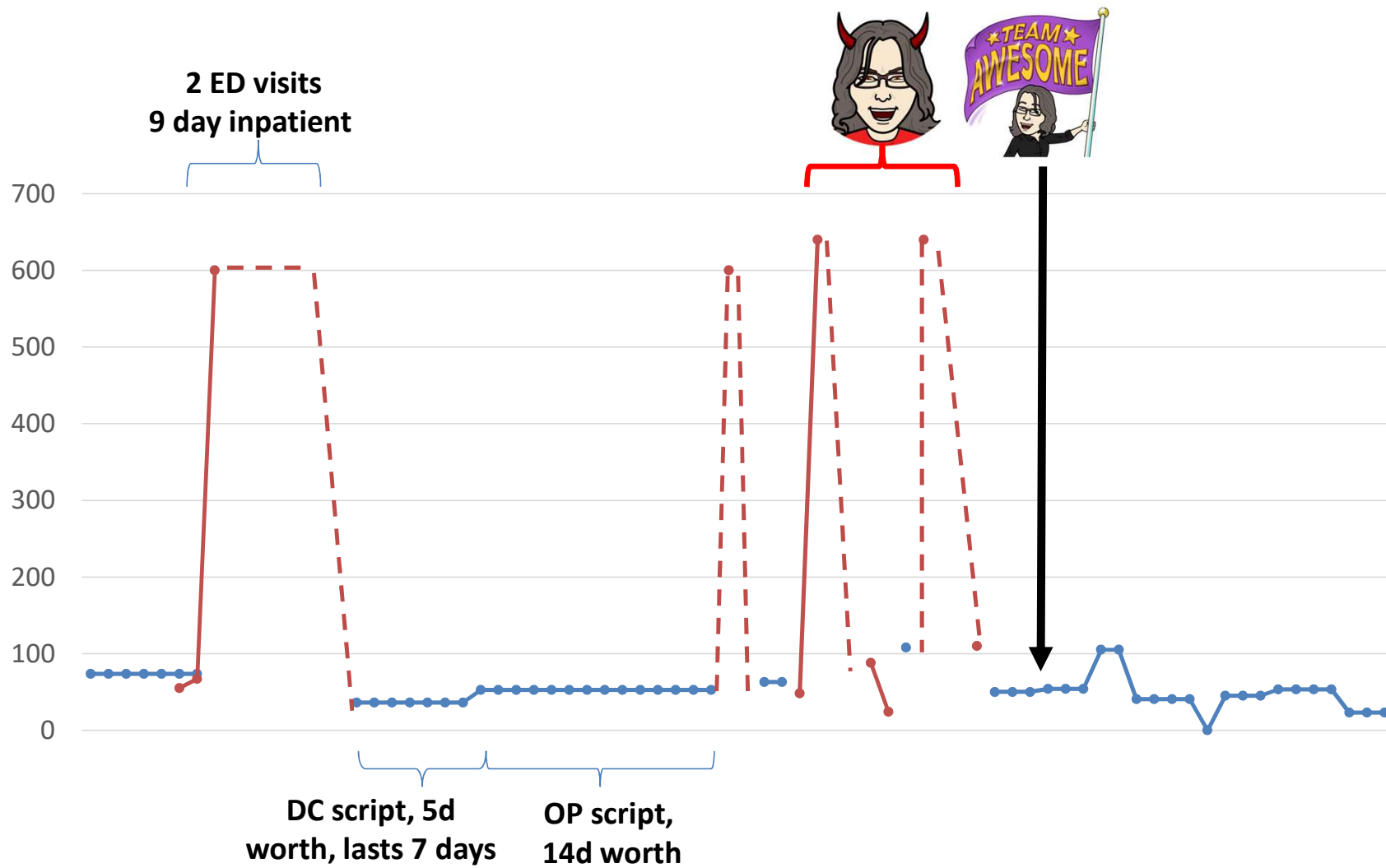
- Outpatient doses are not high, but often staggered and chaotic
- ED doses are not out of line with his outpatient doses, though often IV
- **However, when he gets admitted, the dose available is ~10 times his outpatient dose**



A Behavioral Analysis/Hypothesis

- **Antecedents:**
 - Reduction or “impending reduction” of opioid dose below ~50-60 OME
 - **ALSO: Crises**
- **Behaviors:**
 - Presenting to EDs and providing a history that minimizes chances of discharge and maximizes chance of admission
- **Reinforcers (Possible):**
 - Opioids (- Relief of pain, - Reducing withdrawal, + Reward)
 - Relief of fear, support, etc
 - A thought: “Slot machine” dynamic might explain the intensity of his ED utilization
- **Desired alternate behavior:**
 - Regular outpatient visits with a single provider who manages the SCD and chronic pain





Home pain regimen: Morphine (MS-IR) 15mg po prn. Typical consumption between 45 and 60 oral morphine equivalents per day

Disease modifying therapy: Chronic q4 week partial exchange transfusions to target % HbS=30%

Suggested acute care treatment:

- When presenting for acute care, **the patient should have a full assessment for complications** of SCD as well as any other conditions reasonably indicated (see below for important notes). All management should be guided by assessment and good clinical judgment
- After complete assessment, **morphine sulfate 15mg orally q4hr prn for pain; do not give intravenous opioids.**
- **Do not use iv bolus diphenhydramine** (Benadryl) unless absolutely indicated (eg anaphylaxis)
- **Check CRISP** for recent visits and updates
- **In the absence of complications, hospitalization outside ??? Hospital should be avoided** without input from his primary hematologist, Dr. ????. The patient has weekly appointments with Dr. ???
- **If hospitalized, treat with oral opioids as above** until contact can be made with his primary team
- **His port (if present) should be accessed only by staff at ??? Hospital**
- Contact primary team: **(Our numbers here)**

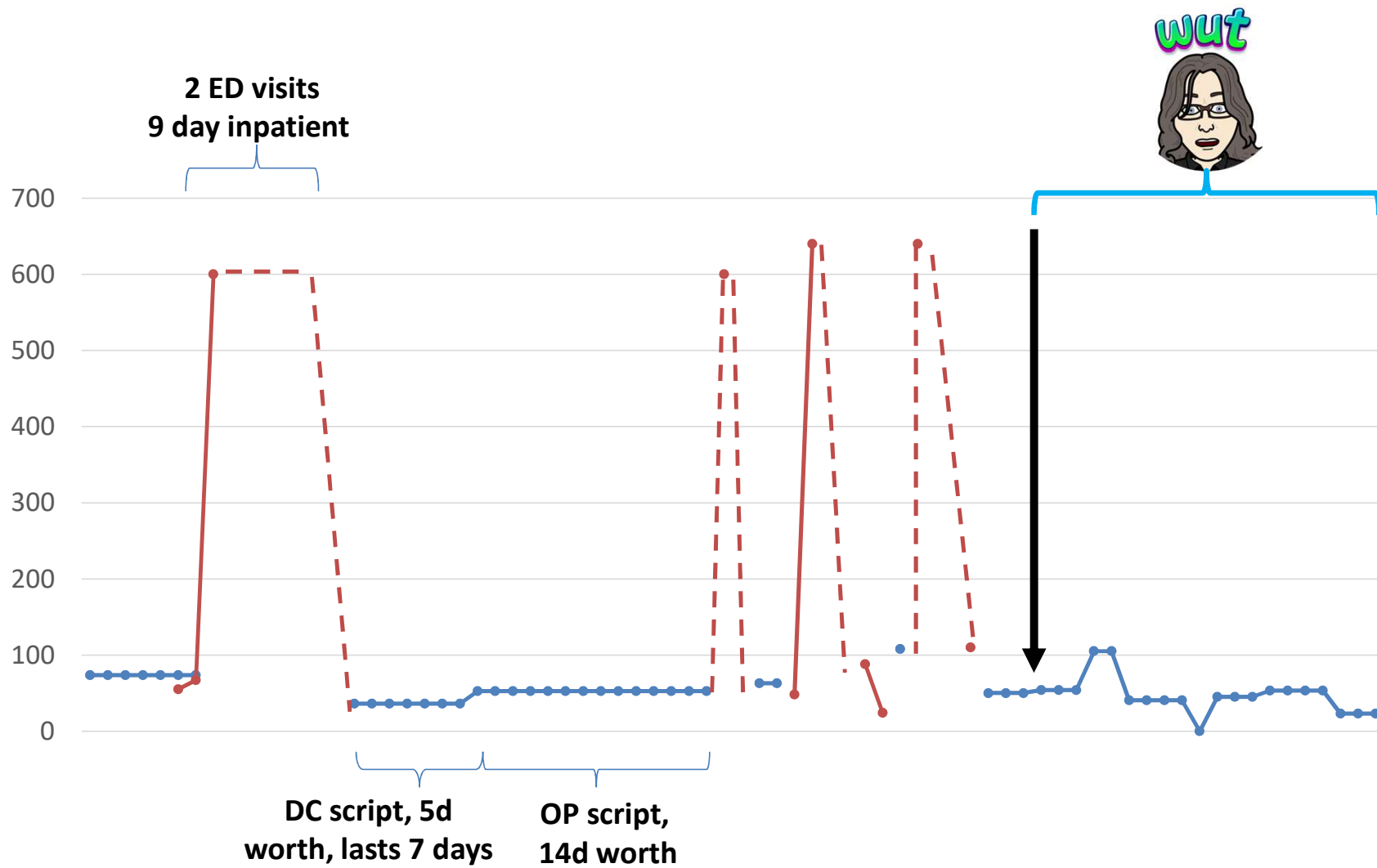
Assess him.

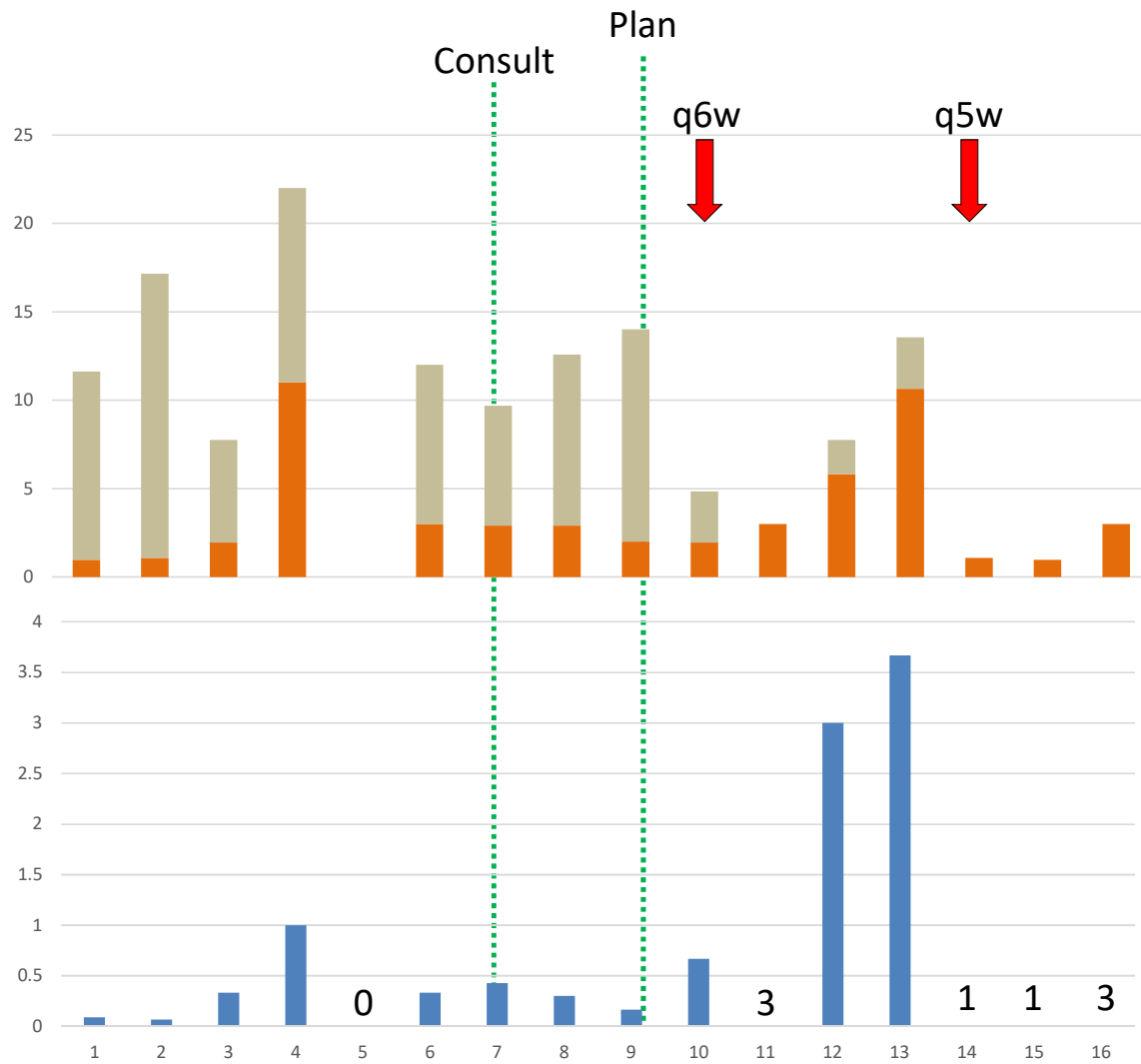
Absent other considerations, treat as chronic pain.

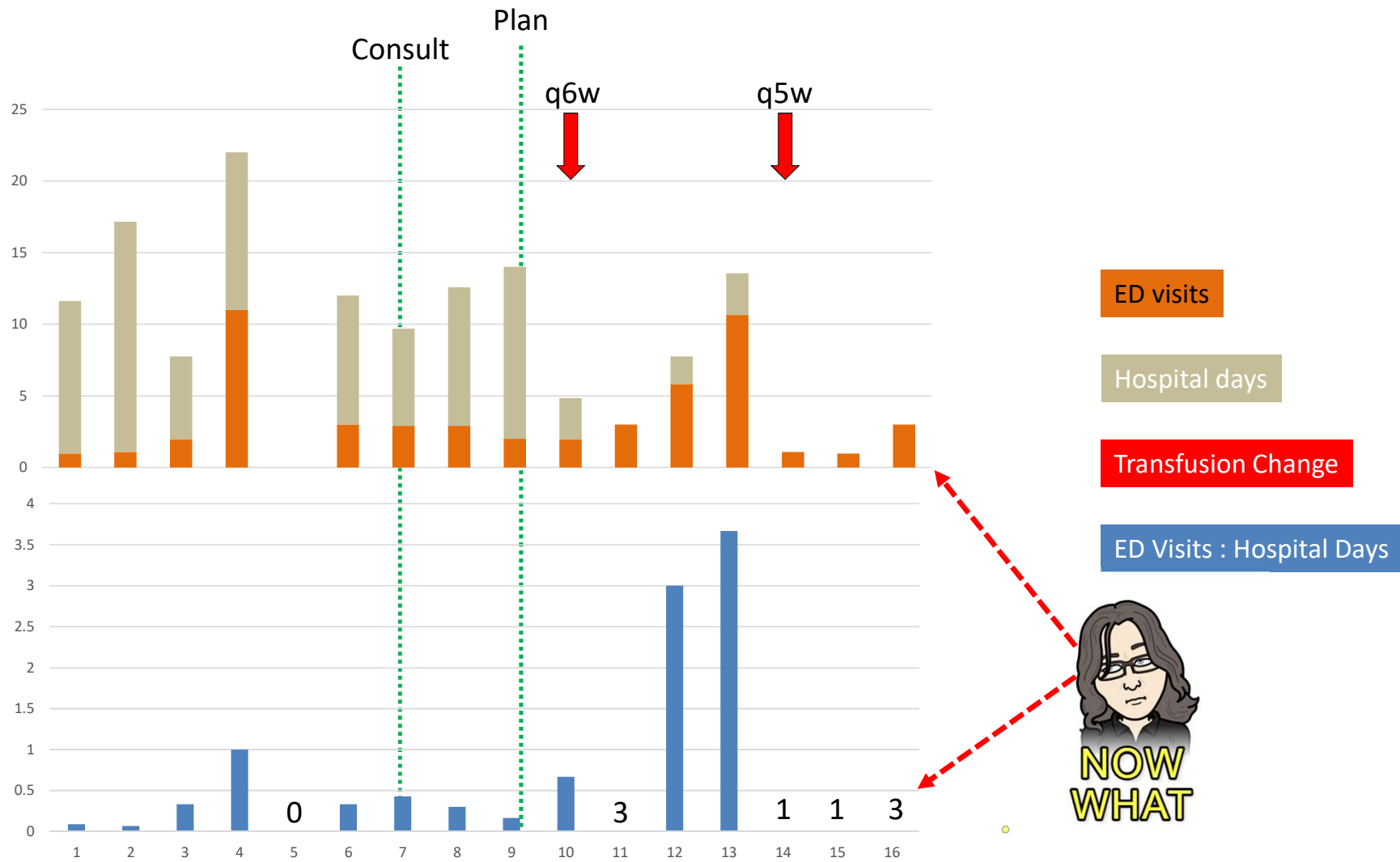
Don't hospitalize without good reason. We'll see him quickly.

Do no harm and don't mess up the plan.

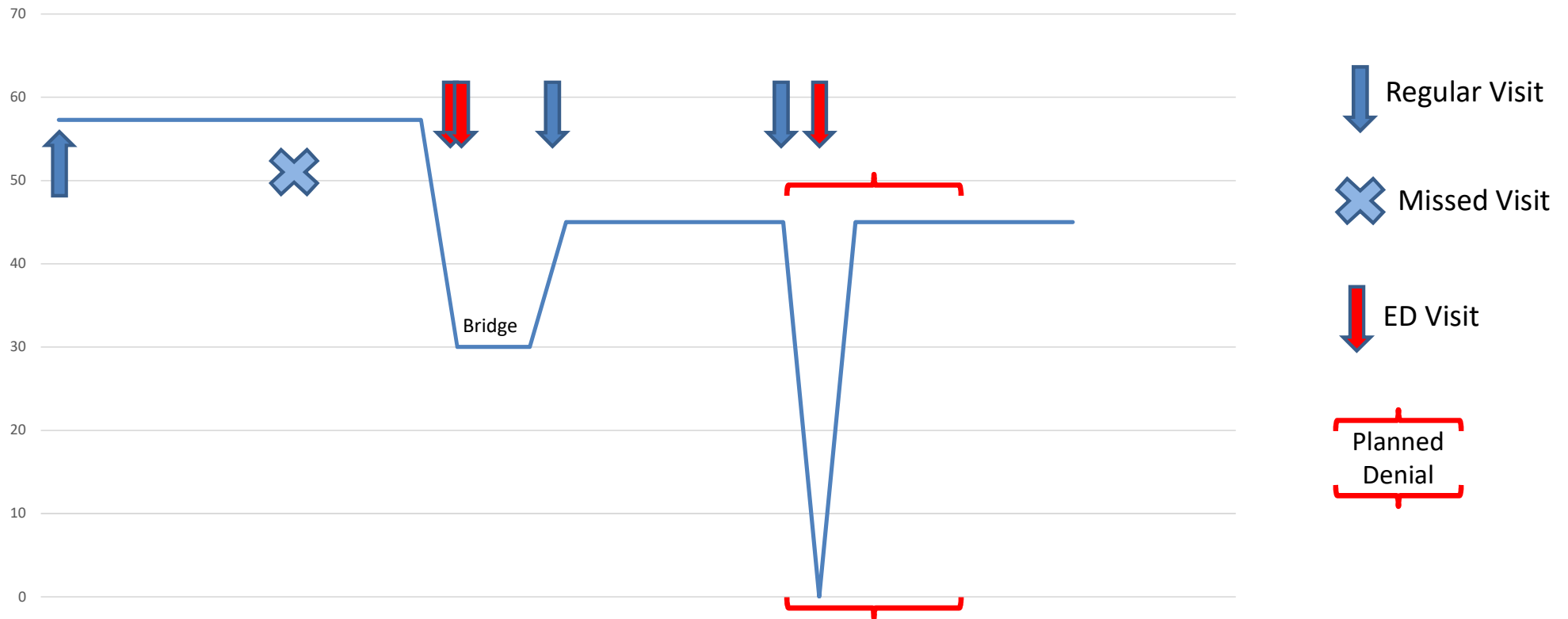








A Funny, Funny Story



The Paradoxes...

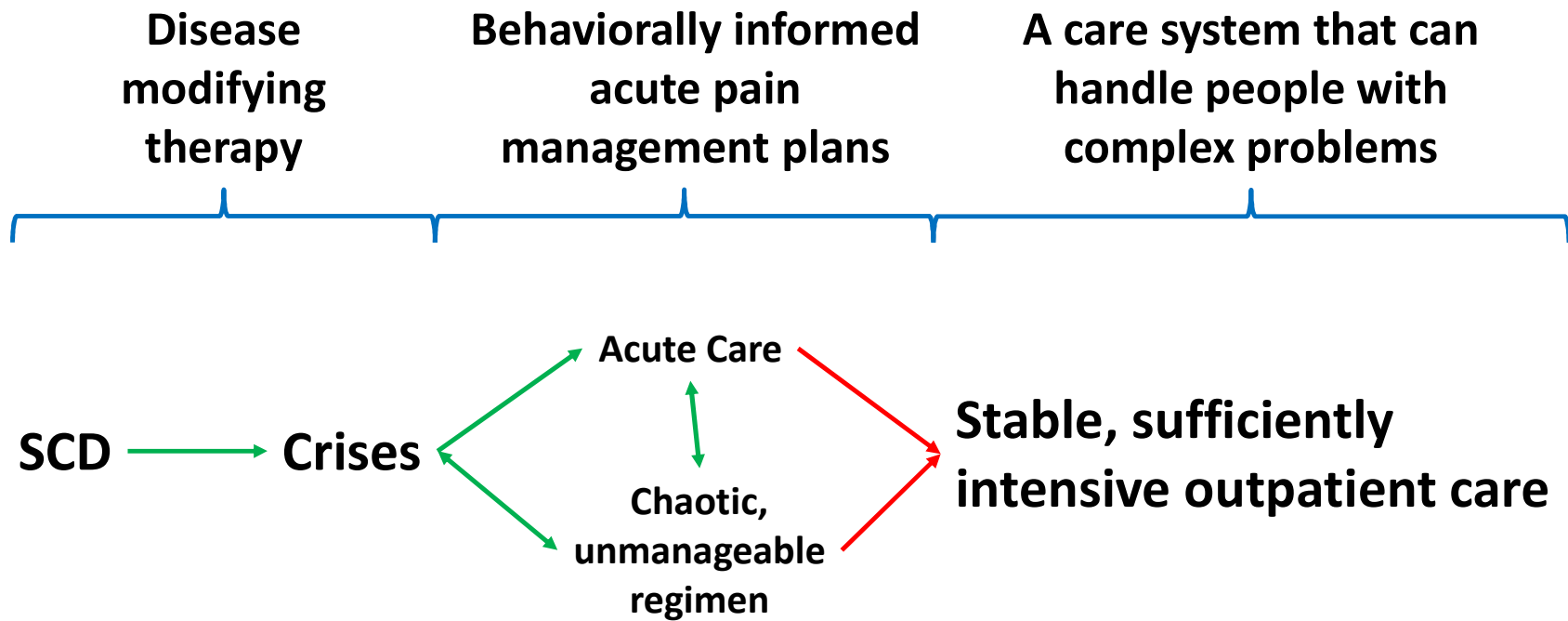
- We continued to prescribe a disease-modifying treatment we knew he wasn't taking, rather than alter treatment or declare failure
- Our concerns about opioid use/ED visits/hospitalizations didn't change our behavior in any effective way
 - Referred out repeatedly; which was unproductive
 - Much talk in the chart about his behavior, little about ours
- As an outpatient, he was suspected of "OUD" while being provided opioids at a fluctuating but fundamentally unchanged dose
- Payment systems designed to limit access to opioids failed, and punished stable, highly supervised prescribing while incentivizing higher doses and more dyscoordinated care



Q: Is it *real pain*, “*psych*,” or *addiction*?

A: What if it's us?





The Four Priorities (Plus 1)

(0. Be the team running the case)

1. Treat the SCD as aggressively as possible
2. If the patient's acute care utilization* itself is a problem, modify your behavior to shift it to an appropriately intense outpatient chronic care model
3. Once the patient is treatable as an outpatient, evaluate chronic pain, stabilize the regimen, and assess its effectiveness relative to its risk. Act on that assessment
4. Diagnose and attempt to manage other relevant comorbid conditions/complications

* Or any other behavior pattern.

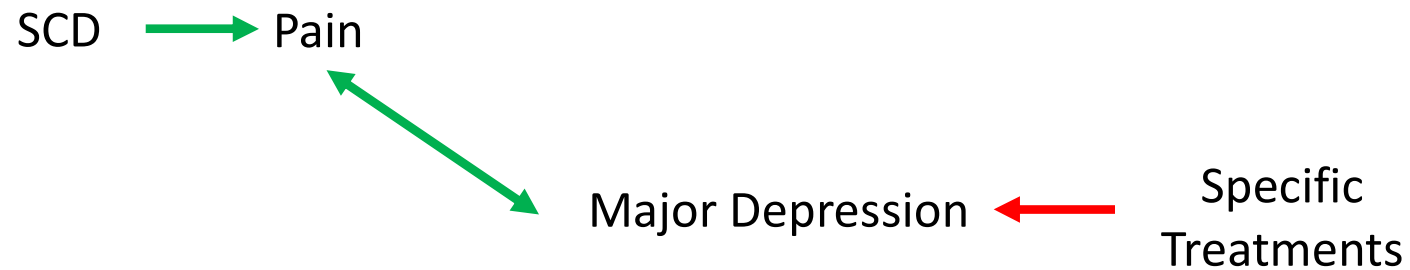


4. Identify and Deal With Other Causes

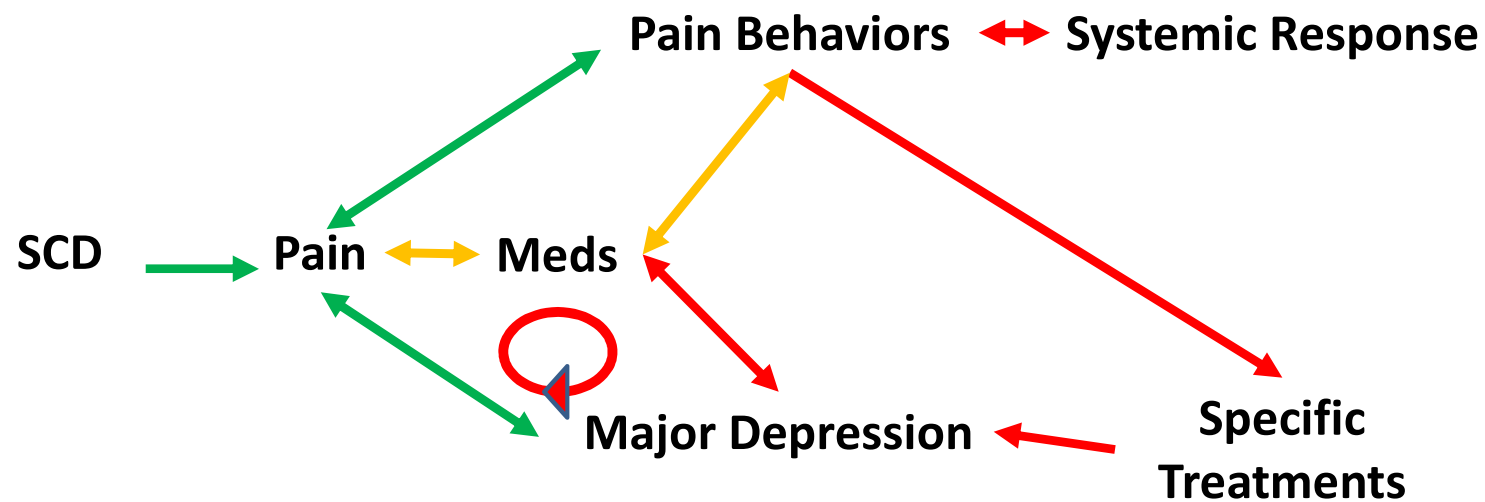
Why is this last?!



Let's Take Depression...



Let's Take Depression...



It's Not Exactly *Last...*

- As a matter of practicality, few other causes can be effectively addressed if:
 - The SCD is out of control
 - The opioid dose is really unstable, or
 - The patient is not really managed as an outpatient
- While things like AVN, depression, etc may well be major *drivers* of pain; they mostly have in common:
 - They take time and complex outpatient interactions with the medical system to deal with
 - Interruptions and inconsistencies in the approach decimate effectiveness



How About Just Going After Chronic Pain Itself?

- If the current regimen is failing, you may decide to add other agents or taper/switch.
 - Pharmacotherapies for chronic pain tend to have modest effects (NNTB ~5-7)
 - Small effects are hard to see with frequent acute pain or a chaotic regimen
 - Similar problem if an opioid taper is happening – what's having the effect?
- Non-pharmacological options for chronic pain require the same sorts of interventions as most of the comorbidities we discussed

NNTB, number needed to treat to be a benefit



American Society of Hematology