

Making a Transformation (MAT) Conference 2024

Keynote 3: Opioid Failure

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Disclosures

None of the presenters, planners, or others in control of content for this educational activity have relevant financial relationships to disclose with ineligible companies whose primary business is producing, marketing, selling, re-selling, or distributing healthcare products used by or on patients.

Mr. G.K.

- » 61 yo man with C7 partial quadriplegia due to Staph epidural abscess in 2009
- » On high doses of opioids ever since initial C3-7 fusion
- » Max morphine equivalent per day 142mg, currently at 120mg
- » In the past had weaned off opioids without worsening pain and was cognitively clearer for 2 months but then arm pain flared with acute UTI and opioids restarted
- » Admitted with severe exacerbation of bilateral arm pain.
- » In ED given 3mg IV hydromorphone, 30mg IV ketamine, 5mg IV diazepam, 1200mg po gabapentin and became unresponsive with respirations down to 6/min
- » Requiring usual ER morphine 30mg TID along with oxycodone IR 5mg QID along with multiple doses of hydromorphone IV and po, without adequate analgesia
- » Pyuria noted, urine cultures + for > 100K enterococcus >>> resulting in dysreflexia?
- » Opioid Assessment consultation requested

The Challenge of Chronic Opioid Therapy

- GIVEN:
 - Chronic opioid therapy may benefit some patients with chronic pain.
 - The risks of opioid therapy appears to, over time, outweigh the benefits in a large proportion of patients
- HOW CAN WE:
 - safely utilize chronic opioid therapy for patients in chronic pain for whom opioids remain effective.
 - Recognize and manage those patients for whom chronic opioid therapy has failed.

Opioid Failure Criteria

Safe Rx Santa Cruz

Pain Management Guidelines:

<https://www.hipscc.org/prescriber-practice-guidelines>

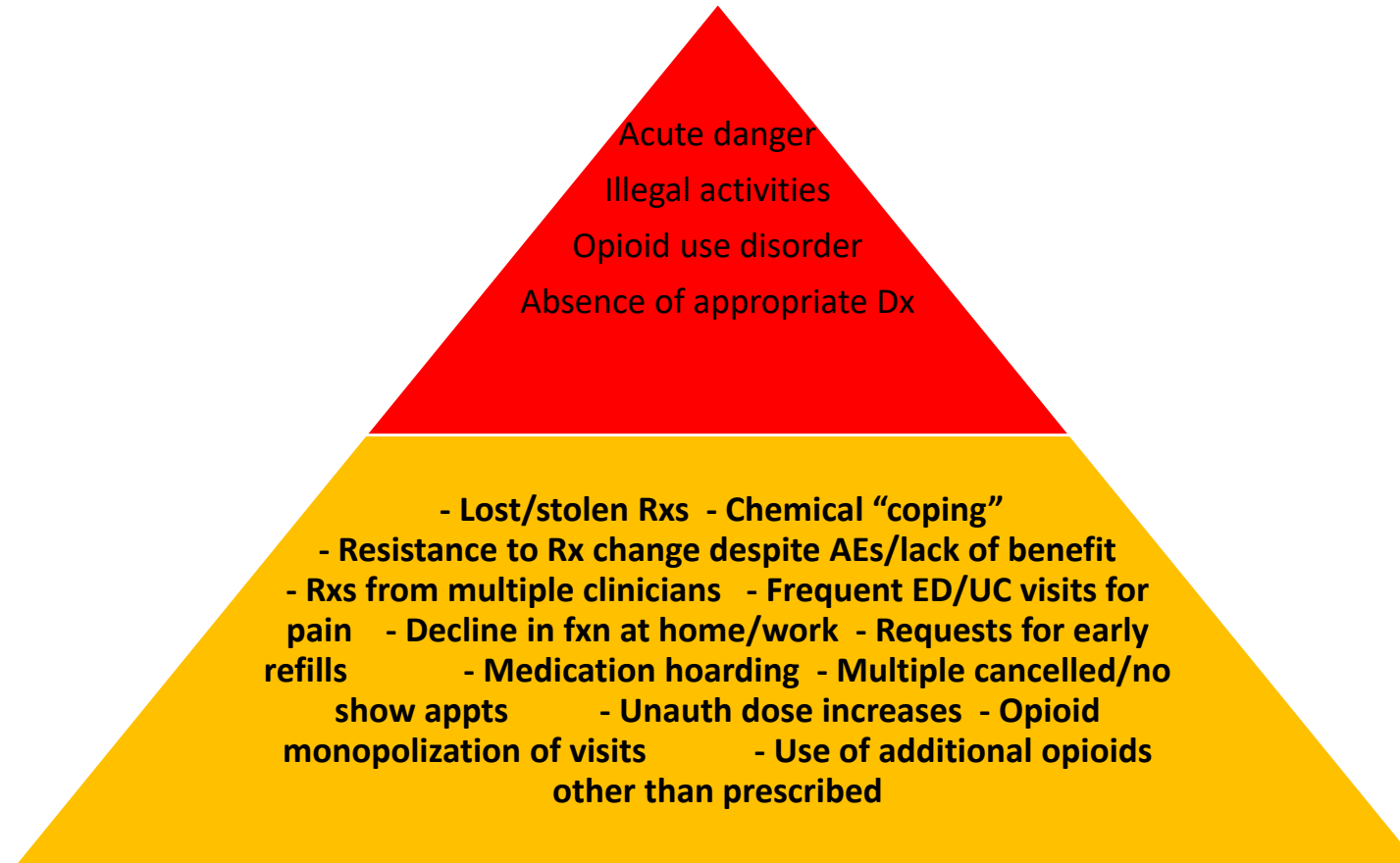
BENEFIT vs RISK

- 1. Are serious opioid-related adverse effects present?***
- 2. Are opioids being used inappropriately?***
- 3. Are opioid goals of care (analgesia/function) not being achieved?***

Are serious opioid adverse effects present?

- » Potentially fatal (respiratory failure)
- » Unmanageable (hyperalgesia, narcotic bowel)
- » Data supported [Ann Int Med. 162(4) 2015.]
 - Overdose
 - Abuse and addiction
 - Fractures
 - Myocardial infarction
 - Motor vehicle accidents

Are opioids being used inappropriately?



Are chronic opioid therapy treatment goals being achieved? >>> PEG

PEG Scale (0-10):

- » Pain
- » Enjoyment of life
- » General activity

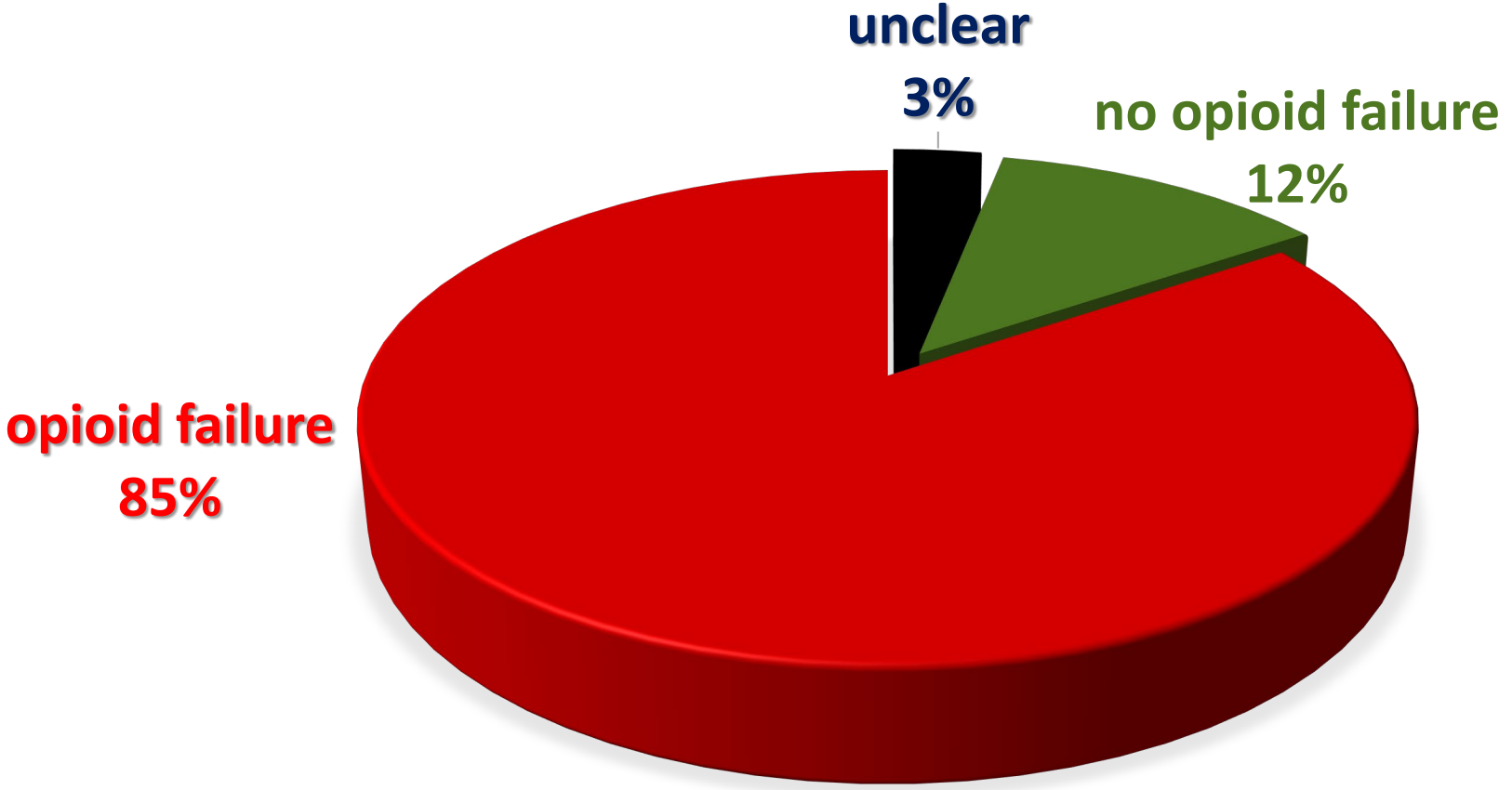
PAMF Opioid Assessment Service (OAS) (sequential sample, n=155)

- » 57% women, 43% men
- » Average age 58.2 yrs (range: 22 - 90 yrs)
- » Average duration of daily pain: 17.5 yrs (range: 6mo - 60yrs)
 - 27% over 20 years
- » Average duration of daily opioid use: 10 yrs (range: 6mo - 37yrs)
- » Average baseline pain scores:
 - PAIN = 5.5/10 PEG = 5.5
- » Average MED: 168 mg
 - 26% had already started opioid weaning at time of initial assessment

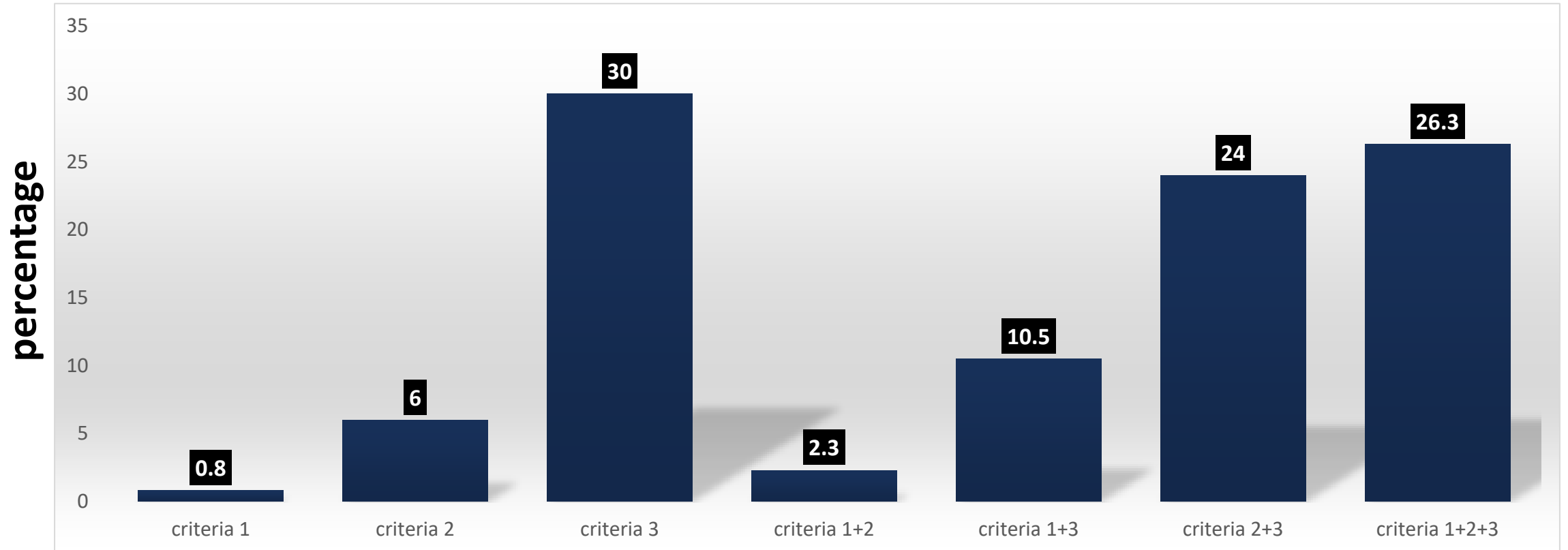
Reported Pain Source – OAS patients

Pain source	%
Axial (neck, spine)	51%
Multiple joints (may include back)	20%
Diffuse (includes fibromyalgia dx)	14%
Lower extremities (legs, knees, feet)	6.4%
Abdomen, bladder	4.6%
Headaches	4.5%

Prevalence of Opioid Failure in OAS Referrals



Opioid Failure Criteria Distribution in OAS Referrals



criteria 1 = Are serious opioid-related adverse effects present?

criteria 2 = Are opioid being used inappropriately?

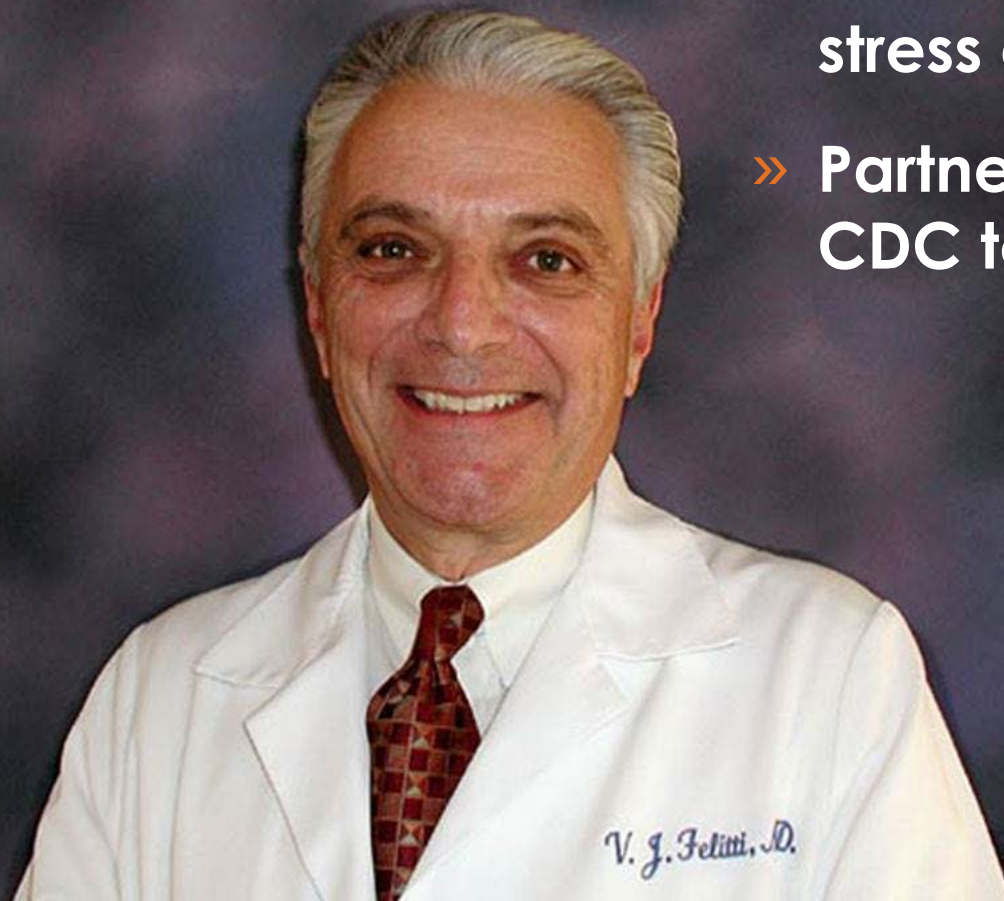
criteria 3 = Are opioid goals of care (analgesia/function) not being met?

Self-Reported Prevalence of Psychiatric Illness and Substance Use disorder in OAS Patients

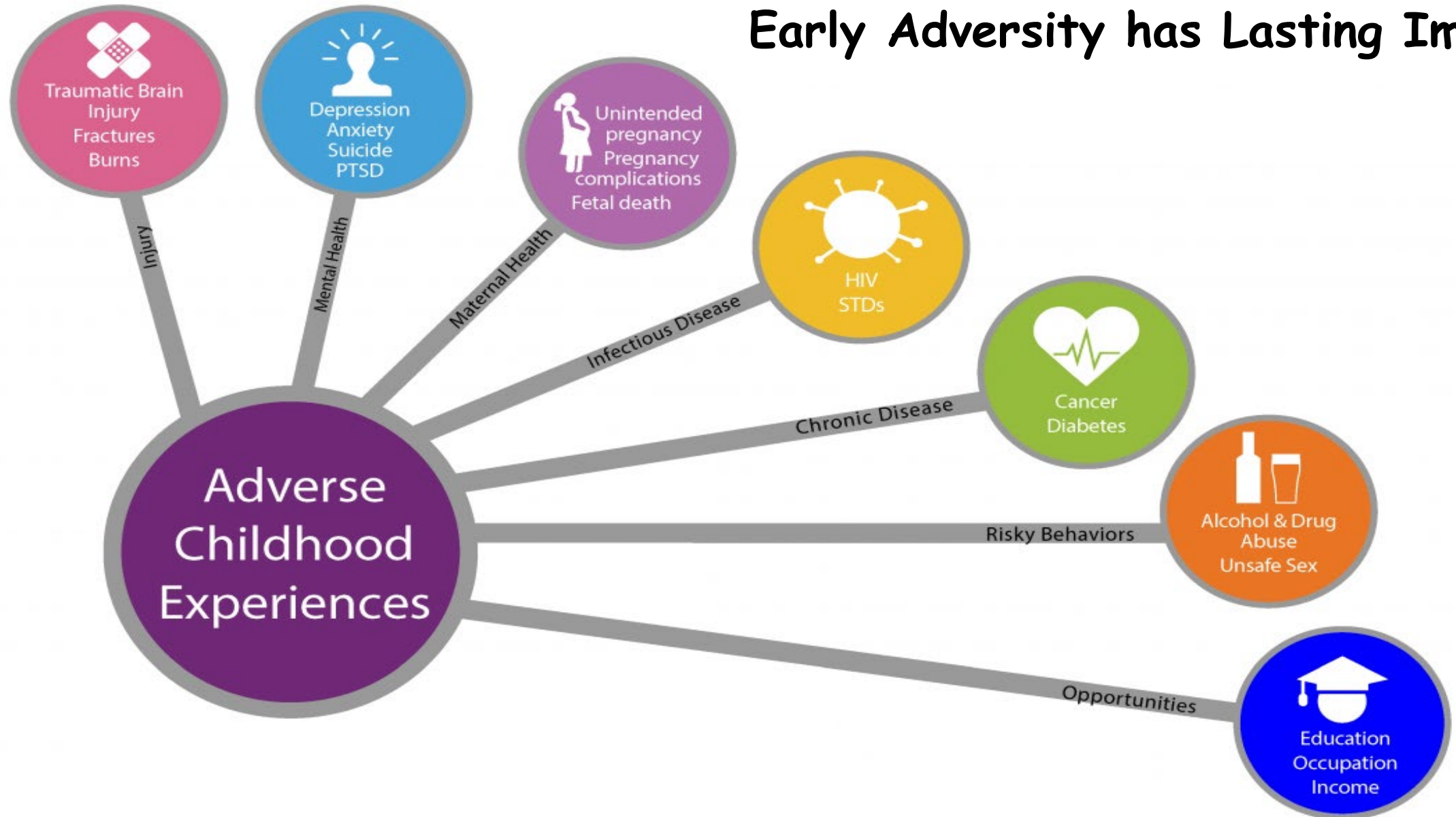
	Psychiatric Illness	Substance abuse/use disorder
PMH	66%	37%
FMH	46%	66%

ACEs: Background and Development

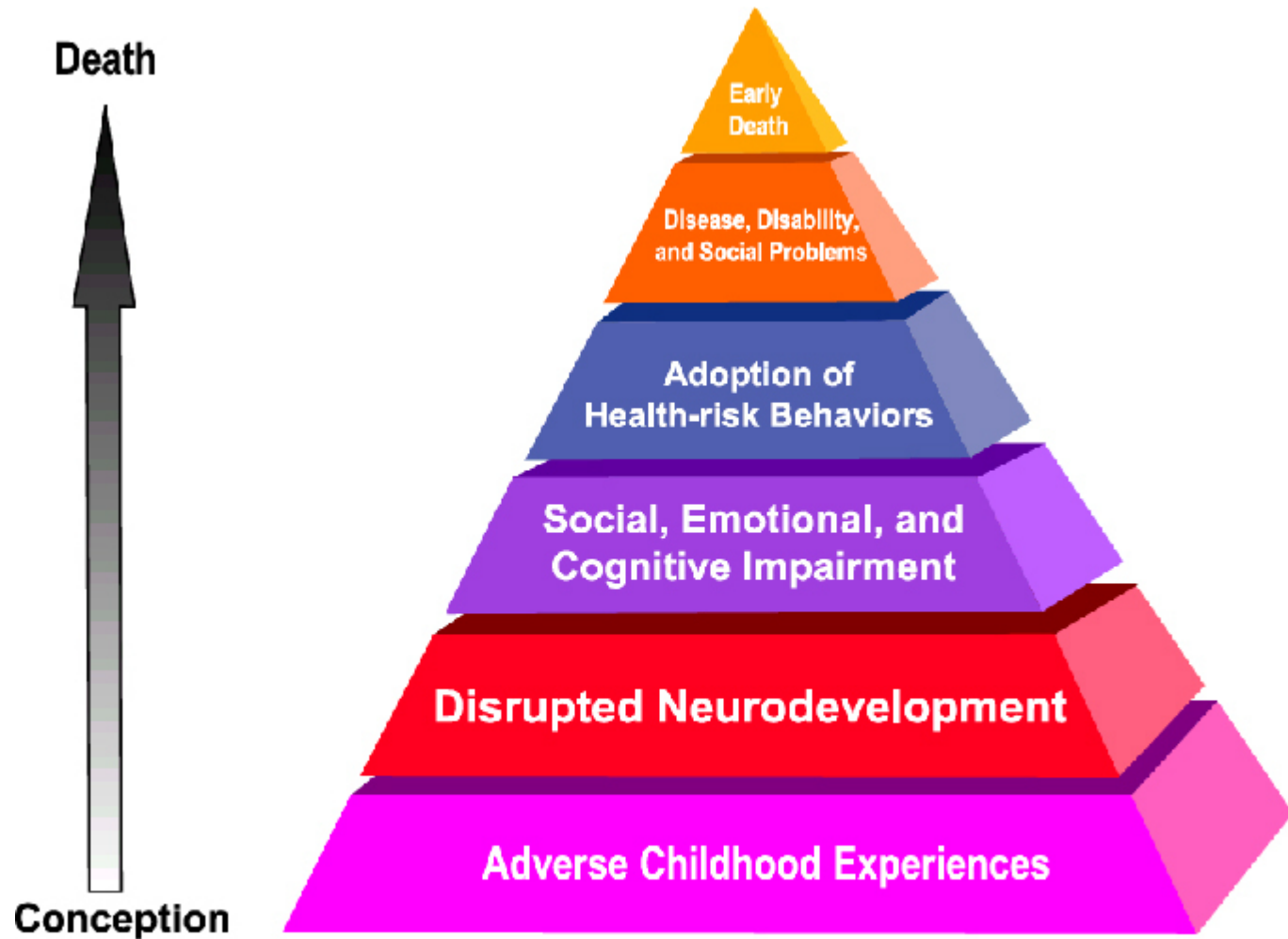
- » Kaiser Physician, VJ Felitti, MD – observations in obesity clinic: patients who were losing significant weight were dropping out, why?
- » Interviews with 286 patients revealed a consistent pattern of childhood stress and trauma.
- » Partnered with Dr. Robert Anda of the CDC to study more than 17K patients



Early Adversity has Lasting Impacts

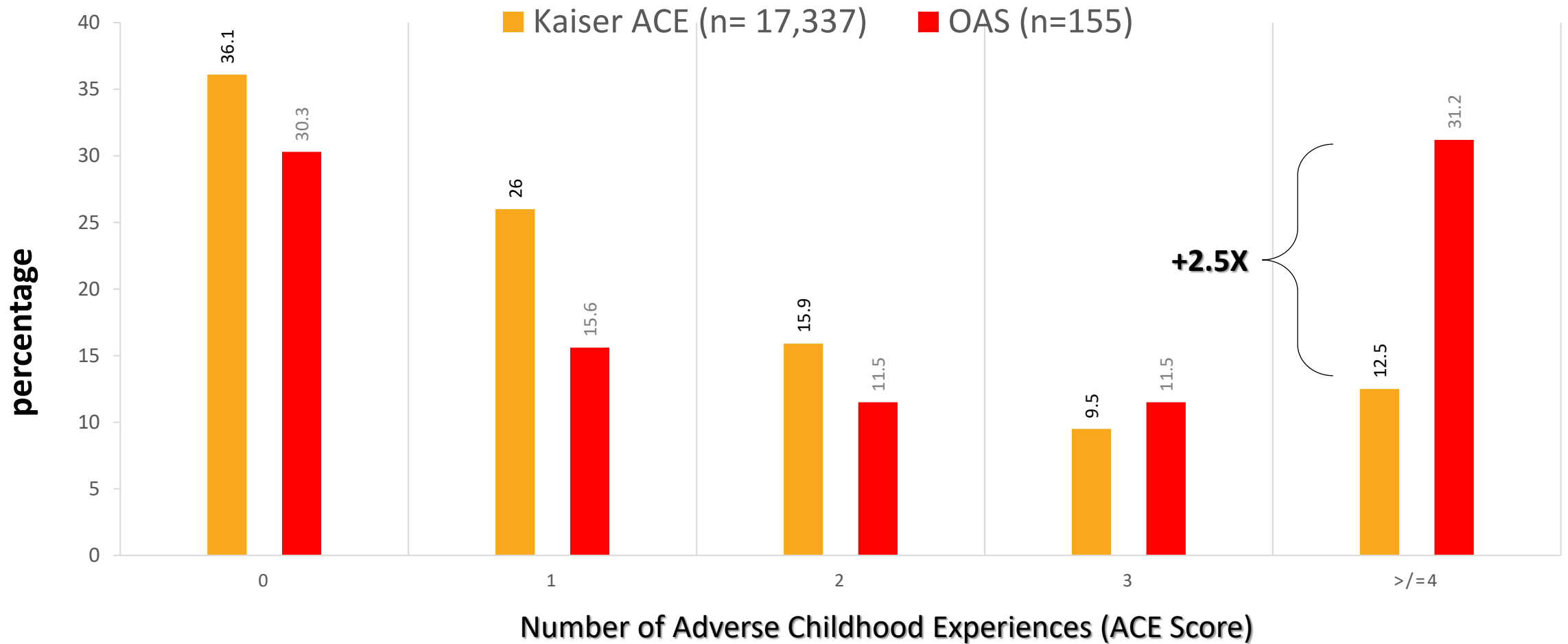


ACEs Pyramid



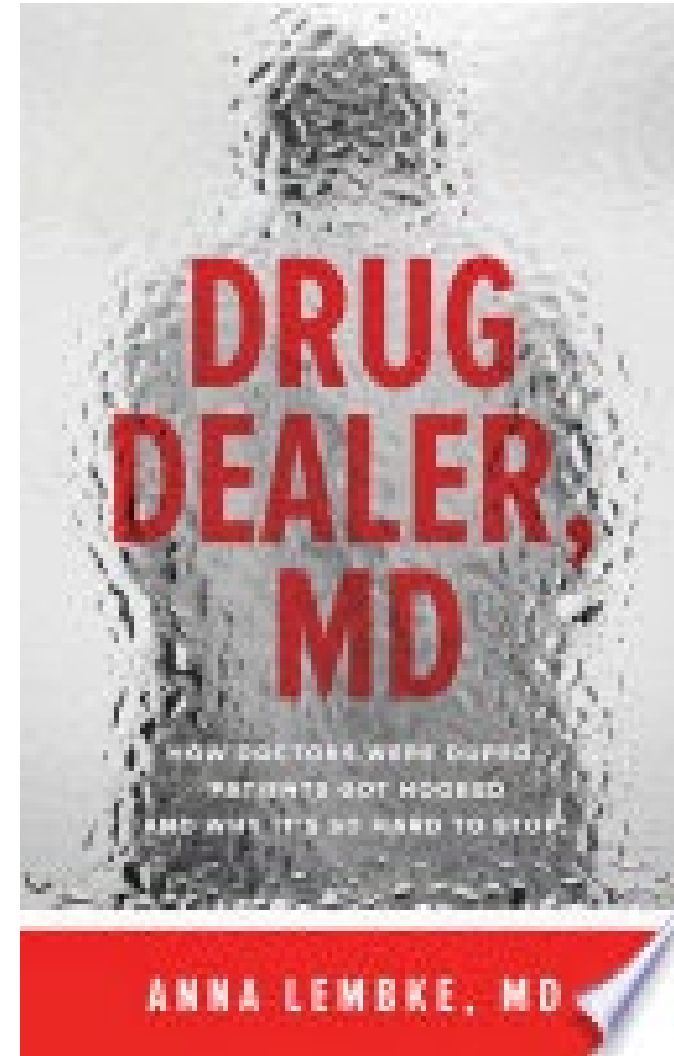
Mechanisms by Which Adverse Childhood Experiences Influence Health and Well-being Throughout the Lifespan

ACE Score Prevalence – Kaiser vs. PAMF OAS

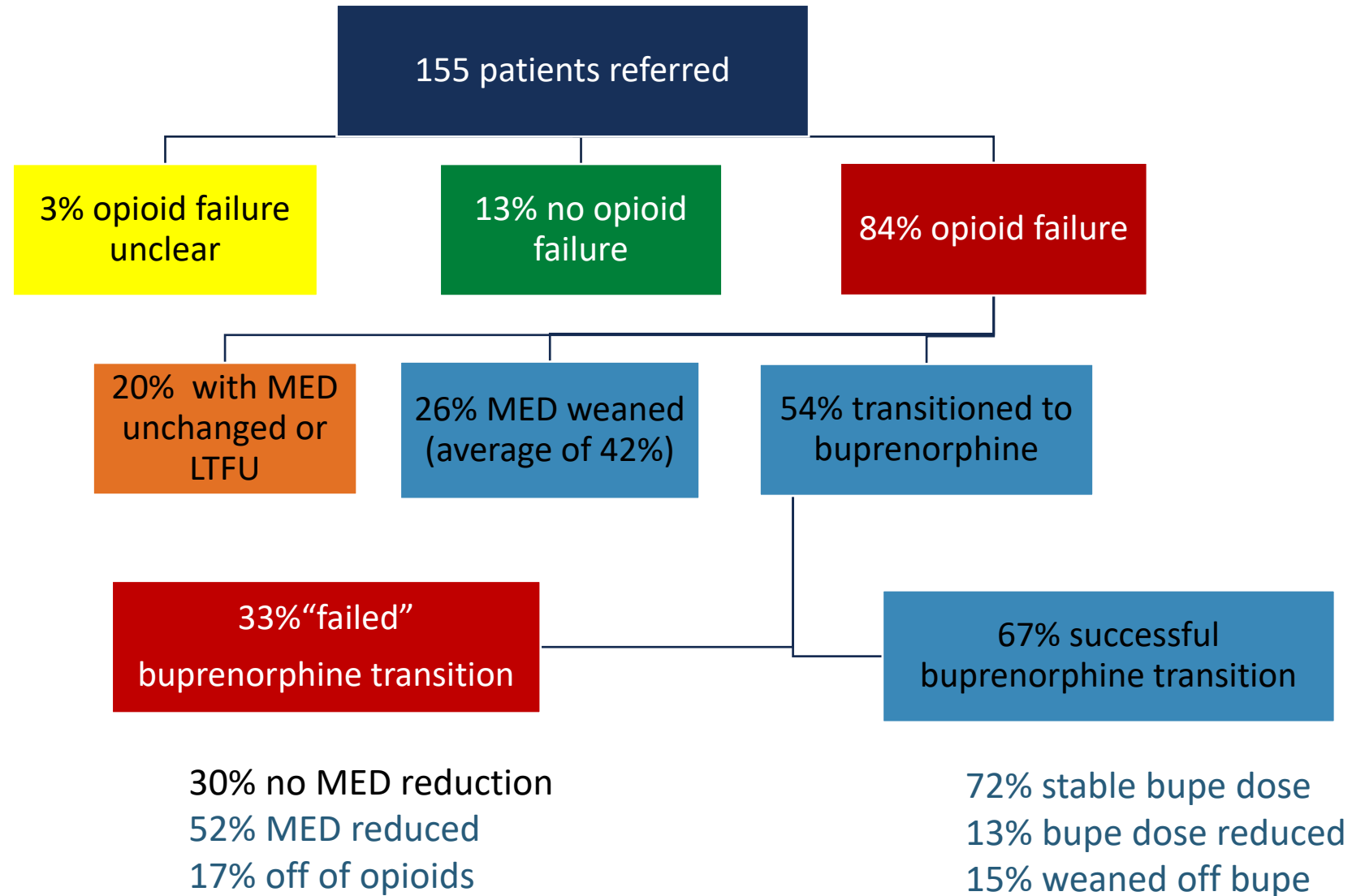


“Males with an ACEs >5 associated with a 4,600 increase in likelihood of later becoming an injection drug user (relative to ACEs of 0)”

-Felliti VJ



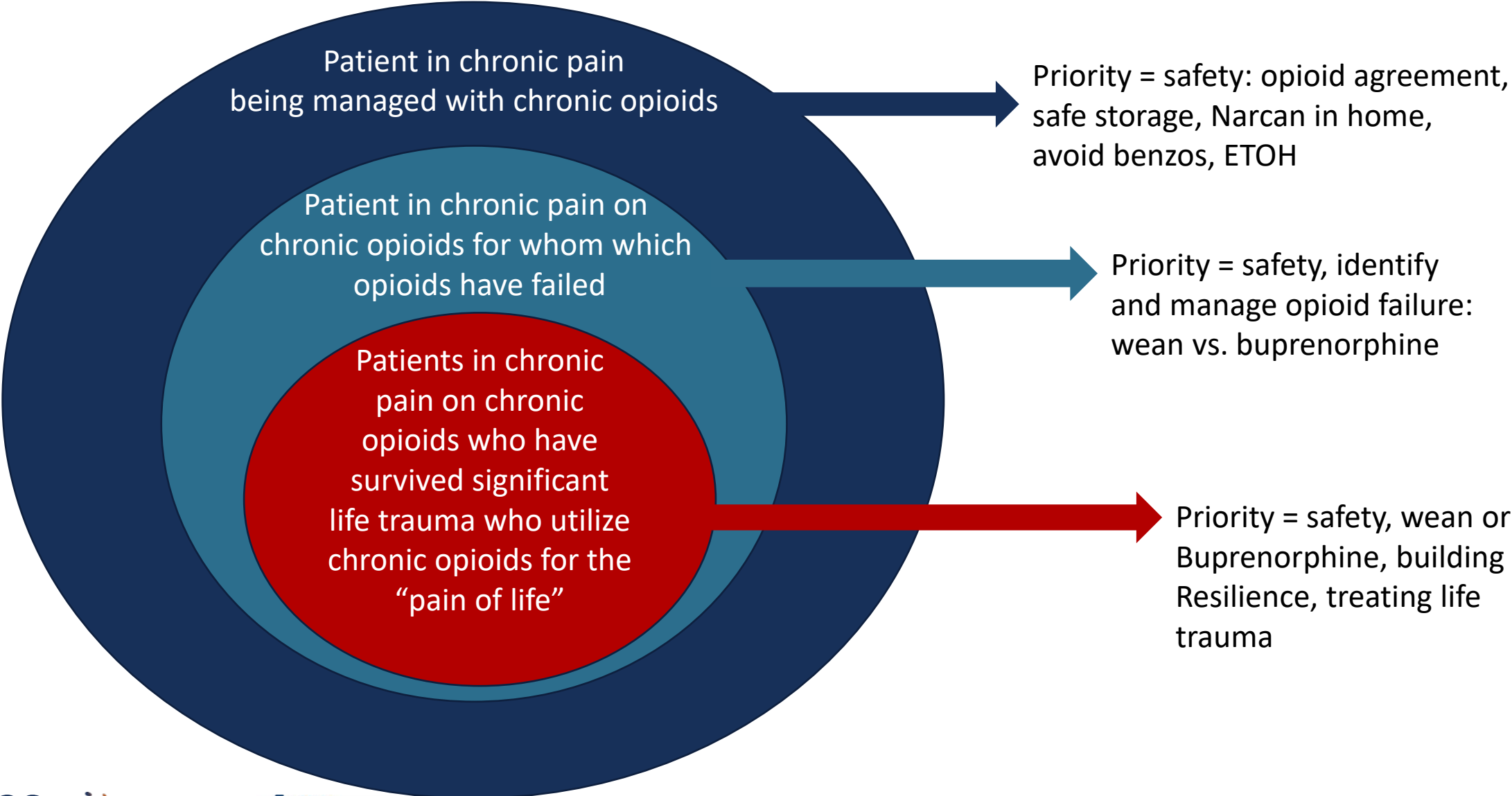
PAMF Opioid Assessment Service Outcomes: 2017-2018



Buprenorphine - Unique Characteristics

- » Ceiling effect on respiratory depression, but not analgesia
- » Less cognitive suppression
- » Tightly bound in mu receptor where it is a partial agonist, with slow dissociation
- » Antagonist at kappa receptor (analgesia, respiratory depression, sedation)
- » Long half life (24-42 hrs)
- » 70% metabolized primarily by liver (CYP3A4) and excreted in bile.
- » 30% renal metabolism but does not accumulate in renal failure, not removed by dialysis

“Layers” of Patients in Chronic Pain on Chronic Opioid Therapy



The Challenge of Addressing Adulthood Impact of Toxic Life Stress

- » Step 1: Education – recognize impact of ACEs on adulthood well being
- » Step 2: Coping /building resilience/empowerment
 - Relaxation/mindfulness strategies
 - Exercise
 - Journaling/Narrative therapy
 - EEG Neurofeedback
 - Spirituality
 - Nutrition
 - Ecotherapy
 - Developing supportive/healthy relationships
- » Step 3: Going deeper
 - Behavioral Health treatments
 - CBT, EMDR, Pain Reprocessing Therapy

Mr. GK

Opioid failure: respiratory suppression, hypogonadism, possible opioid induced hyperalgesia, failure to achieve adequate analgesia

Transitioned to buprenorphine: utilize equianalgesic dose of hydromorphone (Dilaudid):

- MED = 120+ mg divided by 4 = 30mg hydromorphone divided by 6 (Q 4 hrs) doses over the day = 5mg/dose (I allowed 6mg po every 4 hrs)
 - Dose with hydromorphone for 36 hrs to let morphine and oxycodone be metabolized
- » Started 4mg of SL buprenorphine and assessed response/tolerance in 1 hr
- » Titrated dose to 4mg TID

Mr. GK

- » On buprenorphine: “something amazing is happening in my body”
- » In addition to acceptable pain level:
 - “ My head is clear”
 - “I’m sleeping at night”
 - “I have more energy”
- » “I have high hopes this is going to be my ticket to a normal life”

“Why So Many Americans Are Feeling More Pain” - Nicolas Kristof, NYT May 7, 2023



Questions/Discussion

