



**UW PACC**

Psychiatry and Addictions Case Conference

UW Medicine | Psychiatry and Behavioral Sciences

# TREATMENT OF OPIOID USE DISORDERS IN YOUTH

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**Integrated Care  
Training Program**

UW Psychiatry & Behavioral Sciences



# GENERAL DISCLOSURES

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# GENERAL DISCLOSURES

UW PACC is also supported by Coordinated Care  
of Washington

# SPEAKER DISCLOSURES

- Alkermes (maker of XR-NTX) – consultant, research grant
- US World Meds – (maker of lofexidine) – consultant
- The Drug Delivery Company (maker of investigational NTX implant) – consultant
- ASAM – consultant

# PLANNER DISCLOSURES

The following series planners have no relevant conflicts of interest to disclose:

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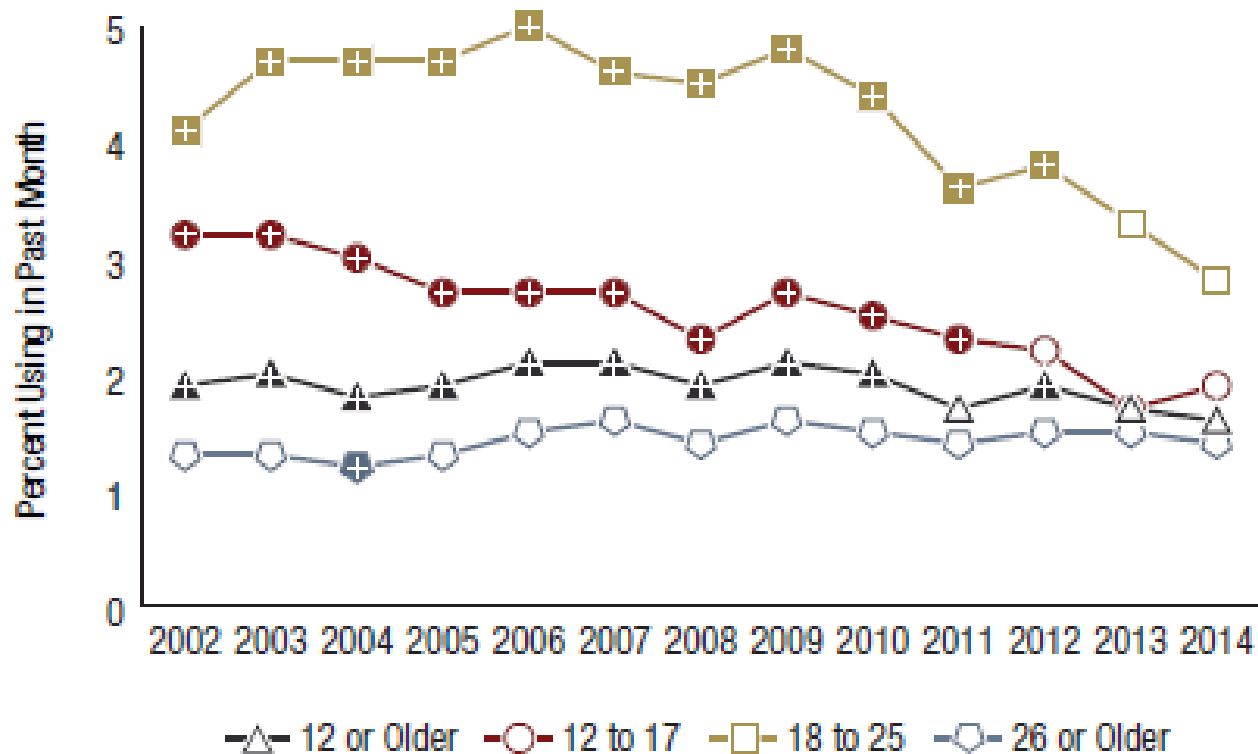
# TREATMENT OF YOUTH OUD OUTLINE

- Scope of the problem
- Prevention
- Overview of the research evidence so far
- Treatment:
  - Survey of current evidence
  - Emerging models of care
- New directions: Engaging families and home delivery
- Conclusions

# SCOPE OF THE PROBLEM

# YOUNG ADULTS HIGHEST PREVALENCE NON-MEDICAL PRESCRIPTION OPIOIDS

Figure 6. Past Month Nonmedical Use of Pain Relievers among People Aged 12 or Older, by Age Group: Percentages, 2002-2014



NSDUH, 2014

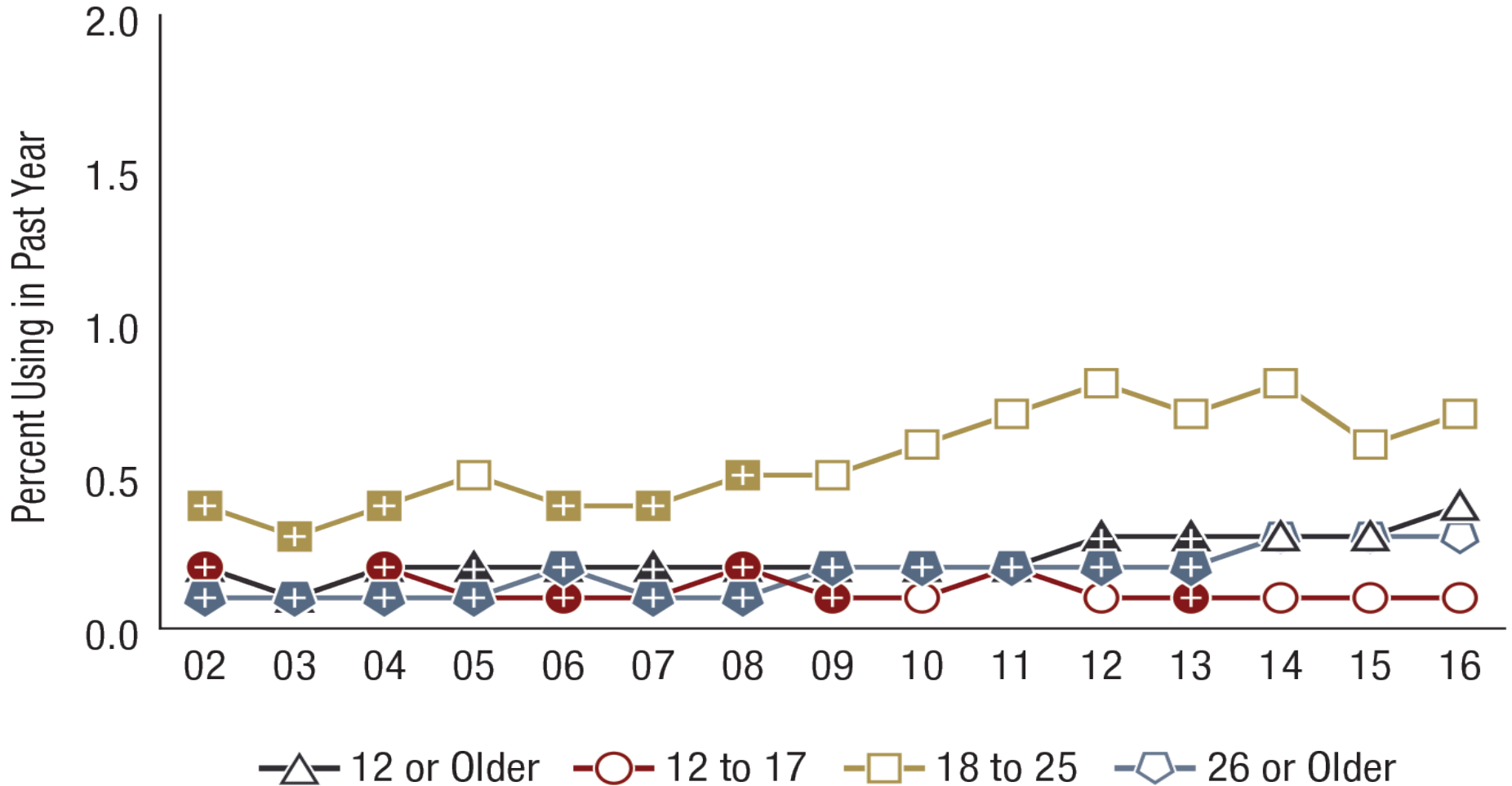
+ Difference between this estimate and the 2014 estimate is statistically significant at the .05 level.



# HISTORICAL MISADVENTURES WE'VE BEEN HERE BEFORE



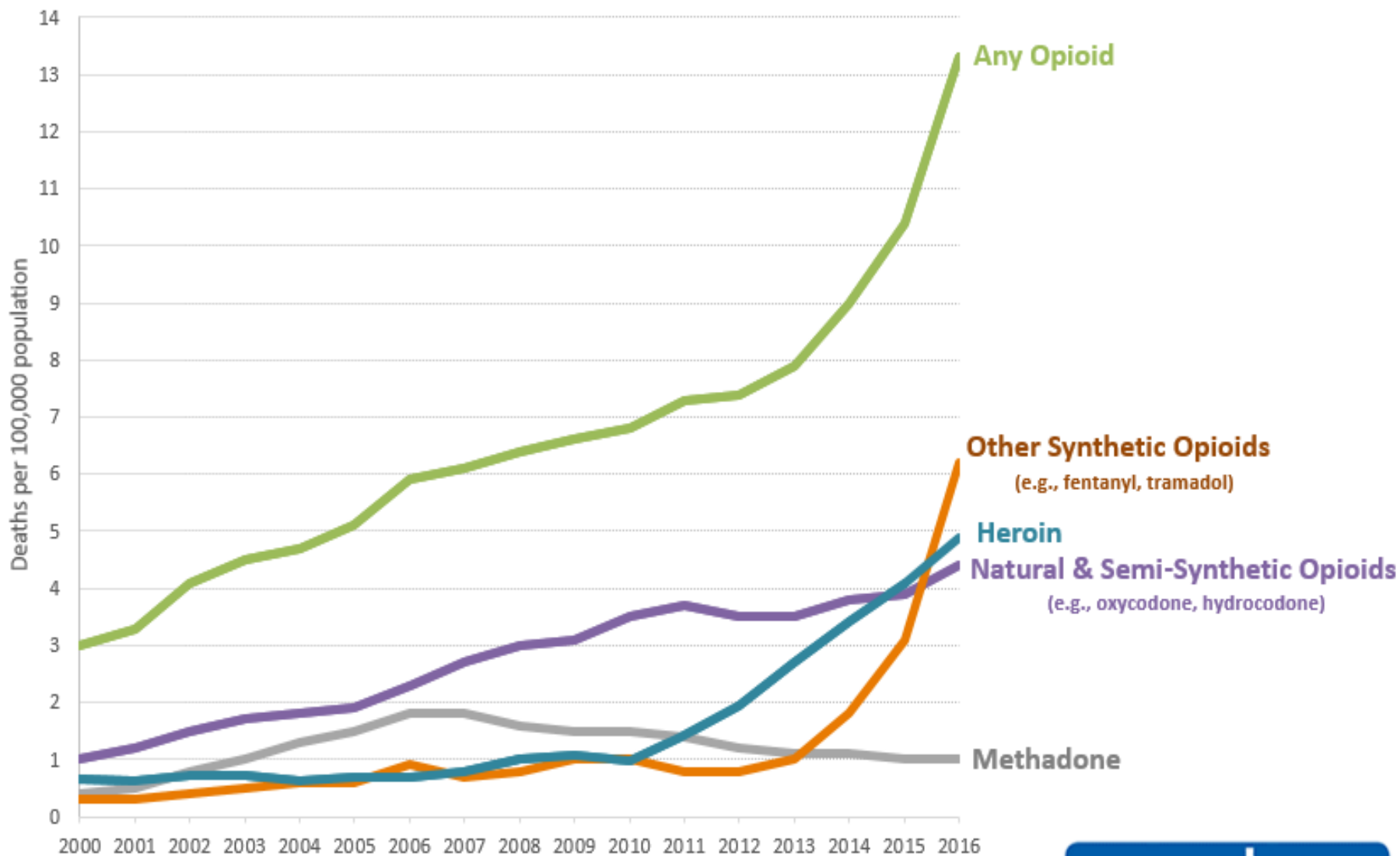
# YOUNG ADULTS HIGHEST PREVALENCE HEROIN



+ Difference between this estimate and the 2016 estimate is statistically significant at the .05 level.

NSDUH, 2016

# Overdose Deaths Involving Opioids, by Type of Opioid, United States, 2000-2016

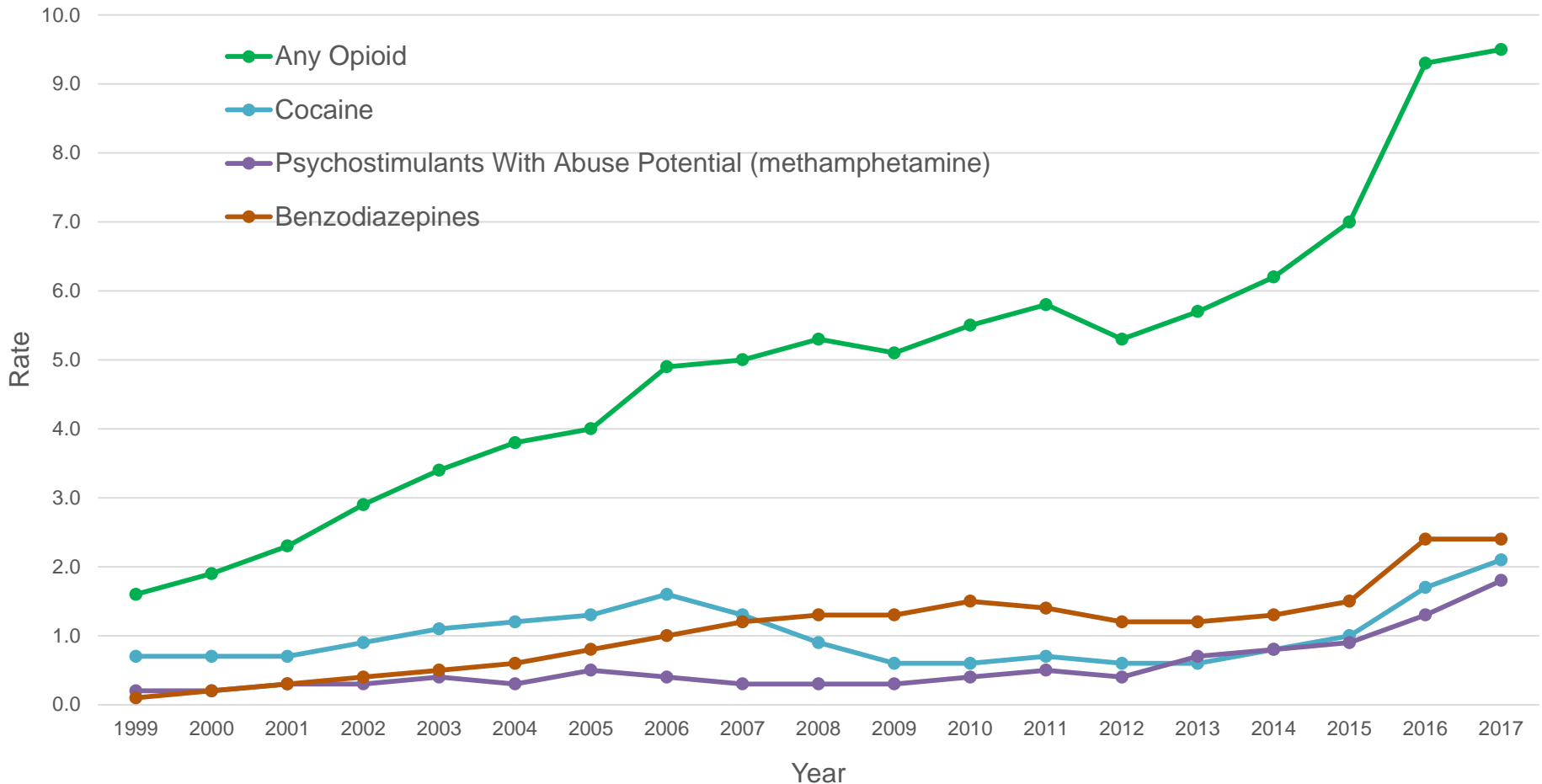


SOURCE: CDC/NCHS, National Vital Statistics System, Mortality. CDC WONDER, Atlanta, GA: US Department of Health and Human Services, CDC; 2017. <https://wonder.cdc.gov/>.

[www.cdc.gov](http://www.cdc.gov)  
Your Source for Credible Health Information

# OVERDOSE DEATHS – TYPE OF DRUG

Adolescents and Young Adults (15-24 year olds)



Data Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2017 on CDC WONDER Online Database, released December, 2018

# PREVENTION

# PATHS TO YOUTH OUD

- The vast majority of youth who initiate opioids have problems with other substances first
- Most youth who are prescribed medical opioid analgesics do not use non-medically
- While some youth have been prescribed medical opioids before non-medical use, the majority initiate with non-medical

# INTERVENTION FOR YOUTH SUBSTANCE USE IS PREVENTION FOR YOUTH OUD

- Addiction – a developmental disorder of pediatric onset
- Earlier onset associated with worse outcomes
- Earlier intervention more effective
- Opioid addiction as an advanced stage along a continuum of illness

# TREATMENT



# WHAT SHOULD WE DO WITH THIS CASE?

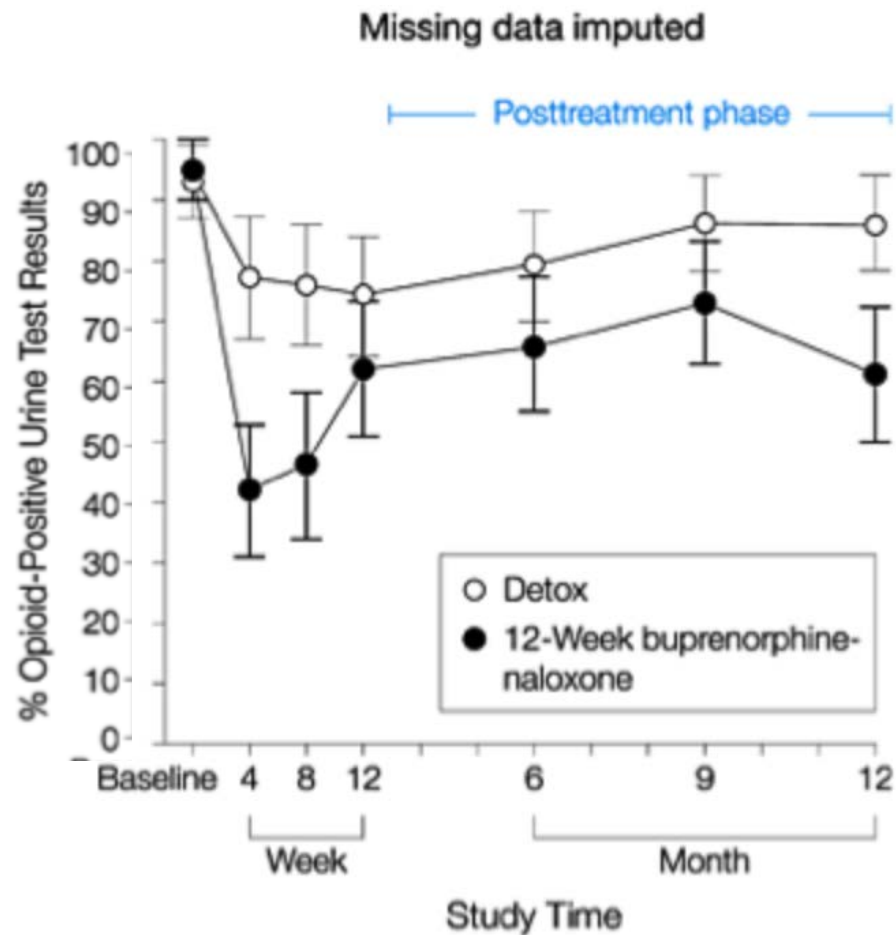
- 18 M
- Onset cannabis age 13
- Onset prescription opioids 15, progressing to daily use with withdrawal within 8 months
- Onset nasal heroin 16, injection heroin 6 months later
- 3 episodes residential tx, 2 AMA, 1 completed, but no continuing care
- Buprenorphine treatment (monthly supply Rx x 4), took erratically, sold half
- Presents in crisis seeking detox (“Can I be out of here by Friday?”)

# FEATURES OF YOUTH OPIOID TREATMENT

- Developmental barriers to treatment engagement
  - Invincibility
  - Immaturity
  - Motivation and treatment appeal
  - Less salience of consequences
  - Strong salience of burdens of treatment
- Variable effectiveness of family leverage
- Pushback against sense of parental dependence and restriction
- Prominence of co-morbidity

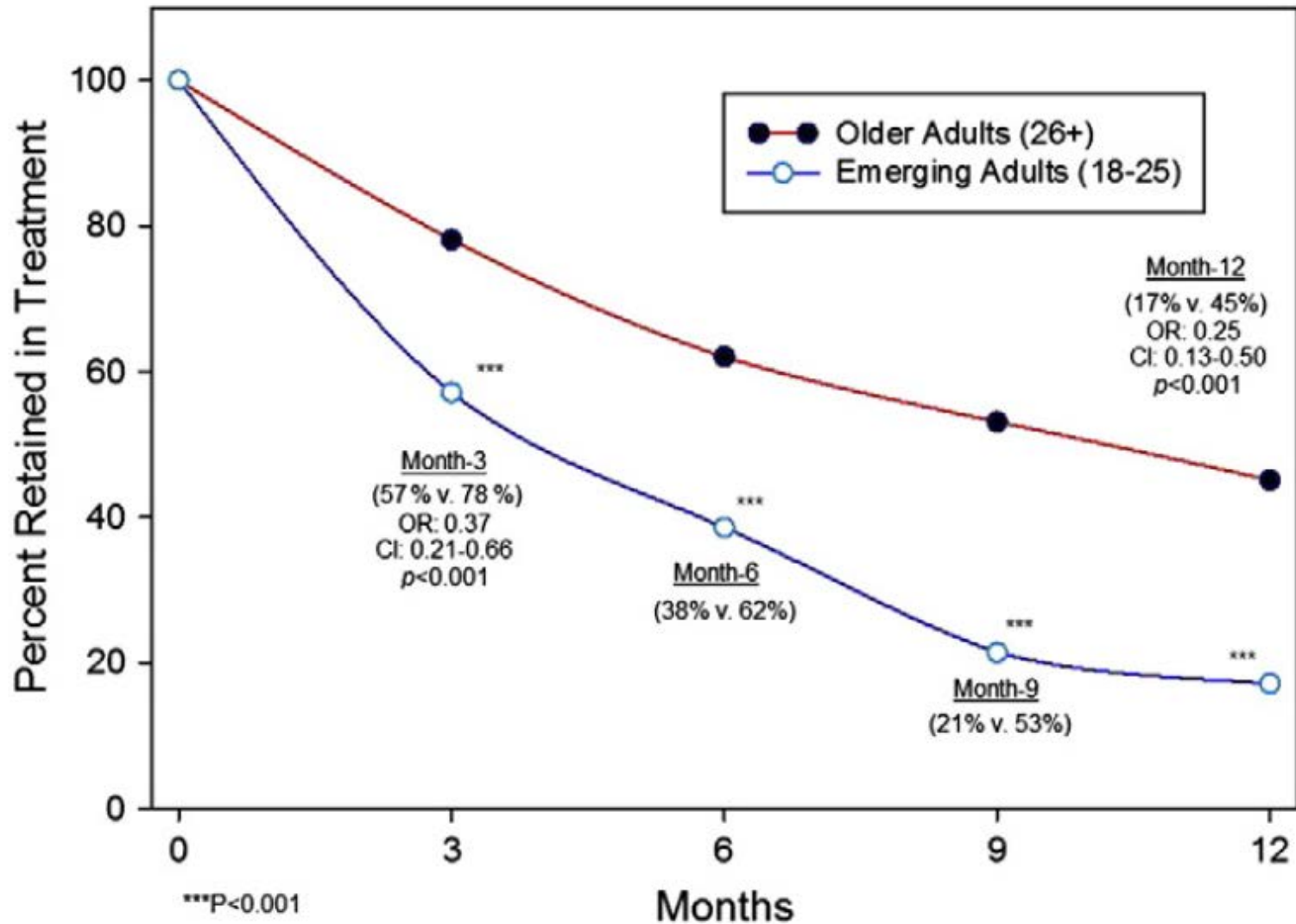
# CTN YOUTH BUPRENORPHINE STUDY

## OPIOID POSITIVE URINES: 12 WEEKS BUP VS DETOX



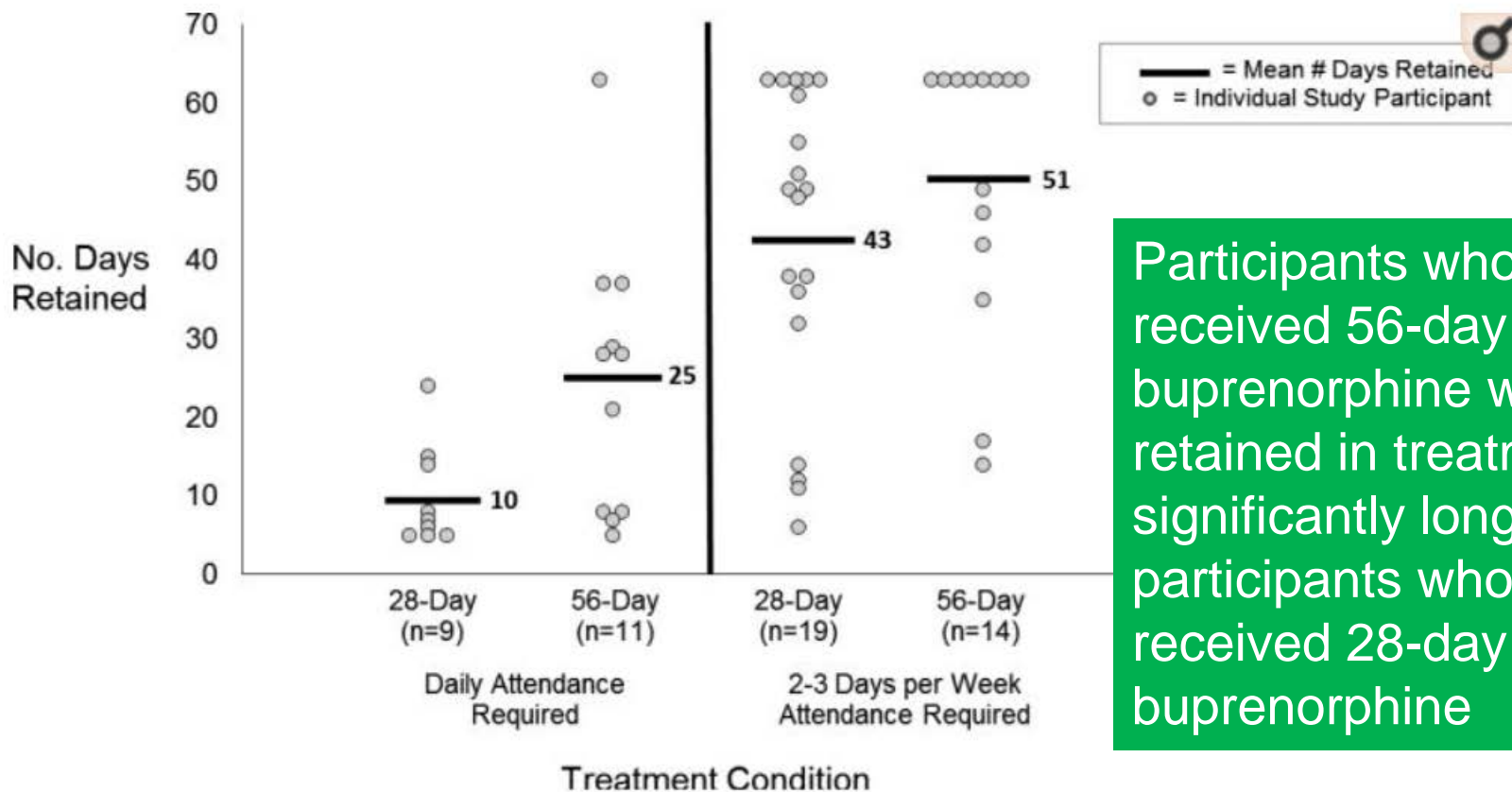
Woody et al JAMA. 2008.

# Retention bup treatment young adults vs older adults



# DURATION OF TREATMENT

## IMPACT OF TREATMENT DELIVERY



Participants who received 56-day buprenorphine were retained in treatment significantly longer than participants who received 28-day buprenorphine

## Treatment of opioid dependence in adolescents and young adults with extended release naltrexone: preliminary case-series and feasibility

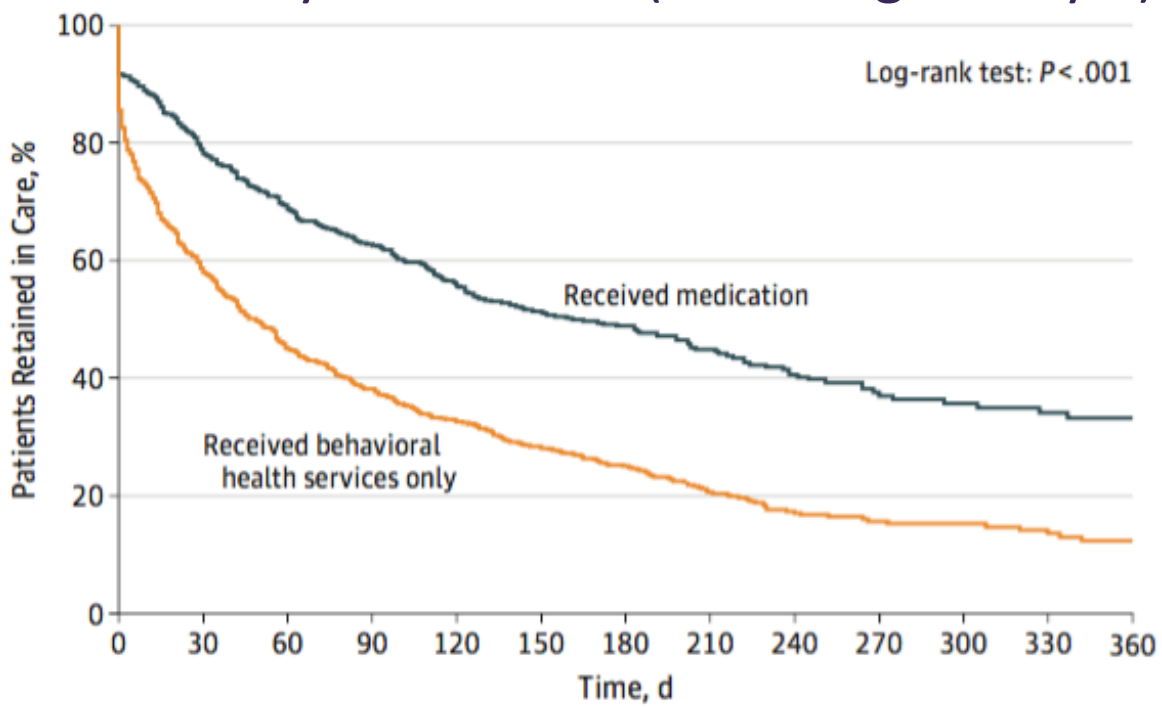
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- 20 youth received xr-ntx
- 16 initiated OP treatment
- 10 retained at 4 months
- 9 “good outcome”

# MEDICATIONS PROMOTE RETENTION FOR YOUTH

- Medicaid claims datasets, 11 states, ages 13-22
- N = 4837 youths dx OUD (out of 2.4M, 0.2%)
- 76% received *any* treatment within 3 months of dx
- 52% received psychosocial services only
- 26% received any medication (5% for age <18 yrs).



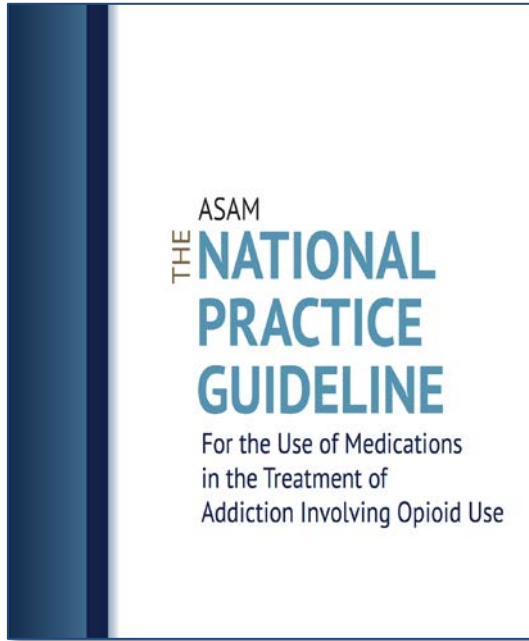
# MOUD FOR ADOLESCENTS AND YOUNG ADULTS

## SUMMARY OF THE EVIDENCE

- Buprenorphine effective, though outcomes not as good as for older adults
- Longer is better; no evidence for time limitation
- XR-NTX promising, but little youth-specific research
- No signal for safety problems based on age
- MOUD first line; No evidence for fail-first



# TREATMENT GUIDELINES FOR YOUTH



## American Society of Addiction Medicine (2015):

- Clinicians should consider treating adolescents using the full range of treatment options, including pharmacotherapy

## American Academy of Pediatrics (2016):

- Encouraging pediatricians to consider offering MAT or discussing referrals to other providers for this service

POLICY STATEMENT Organizational Principles to Guide and Define the Child Health Care System and/or Improve the Health of all Children

American Academy  
of Pediatrics



DEDICATED TO THE HEALTH OF ALL CHILDREN™

## Medication-Assisted Treatment of Adolescents With Opioid Use Disorders

COMMITTEE ON SUBSTANCE USE AND PREVENTION

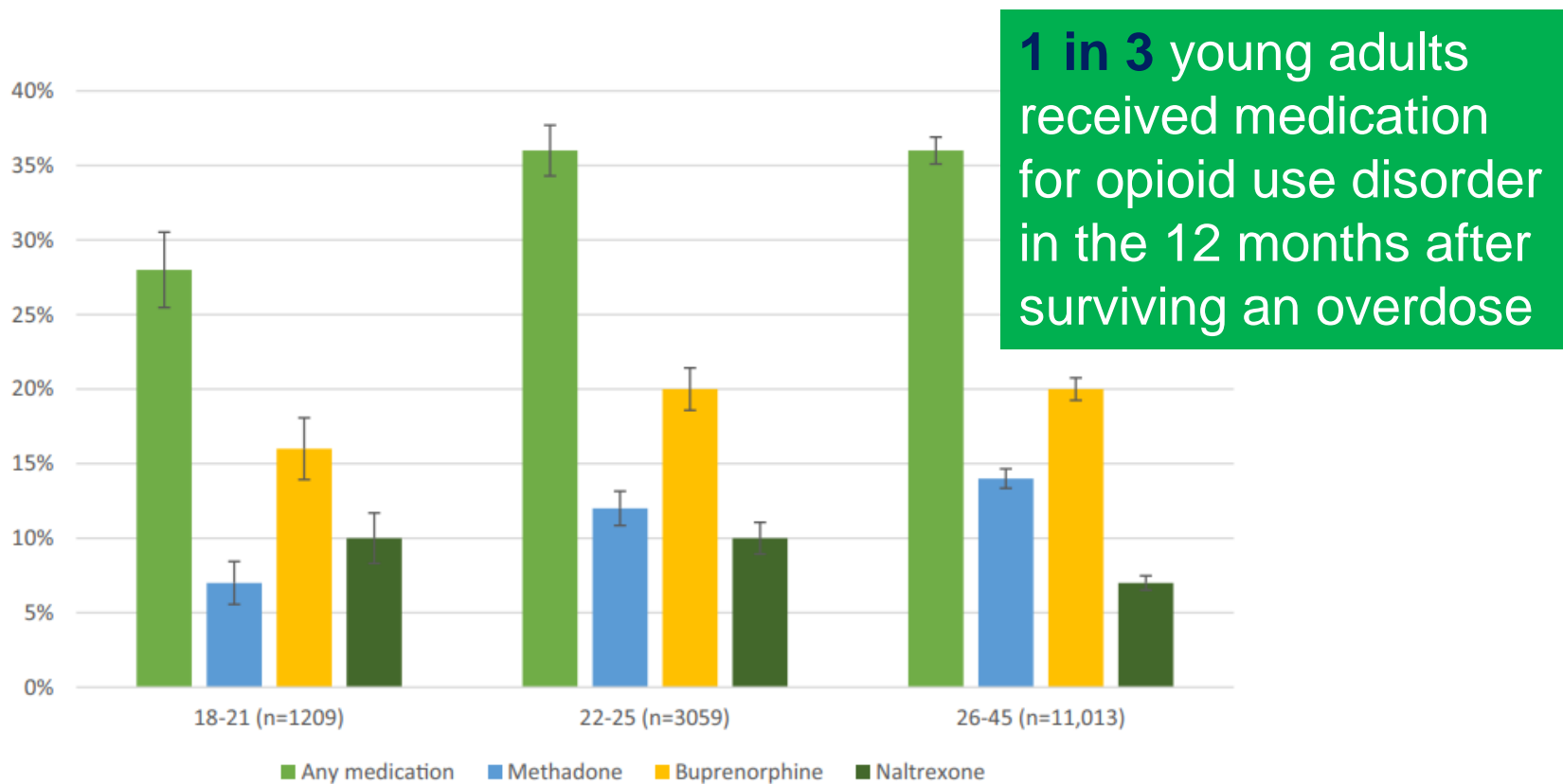
Committee on Substance Use and Prevention Medication-assisted treatment of adolescents with opioid use disorders. *Pediatrics*, 2016;138(3):1893.  
Kampman K & Jarvis M. *Journal of Addiction Medicine*, 2015;9(5):358-367.

# IF ONLY IT WERE THAT EASY



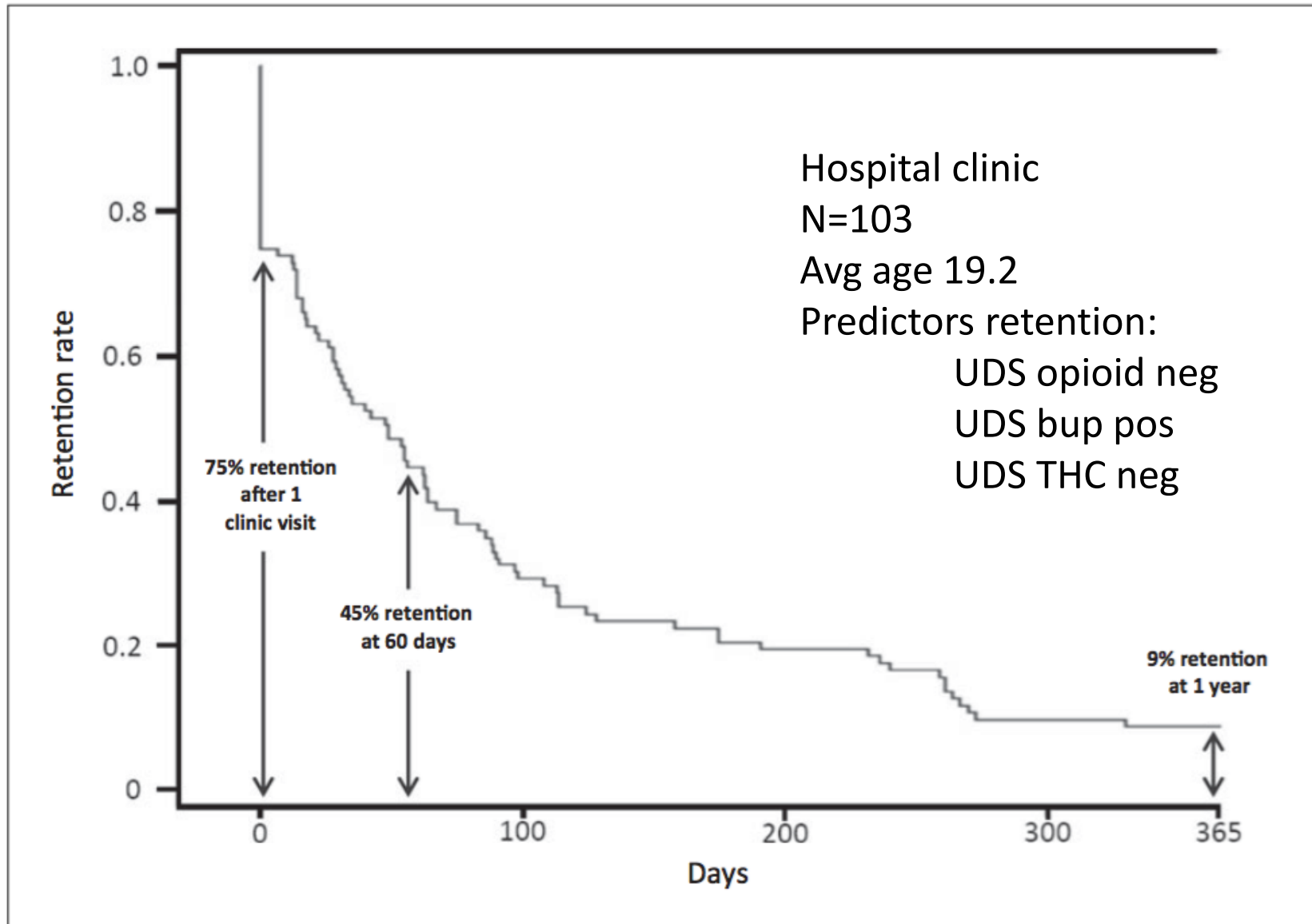
*"We found this in your brain."*

# LOW RECEIPT OF MOUD AFTER NON-FATAL OVERDOSE



**Figure 1.** Receipt of medication treatment in the 12 months after a nonfatal overdose, stratified by age groups. Error bars represent 95% CI.\*. \*Individuals could have received more than one kind of medication type.

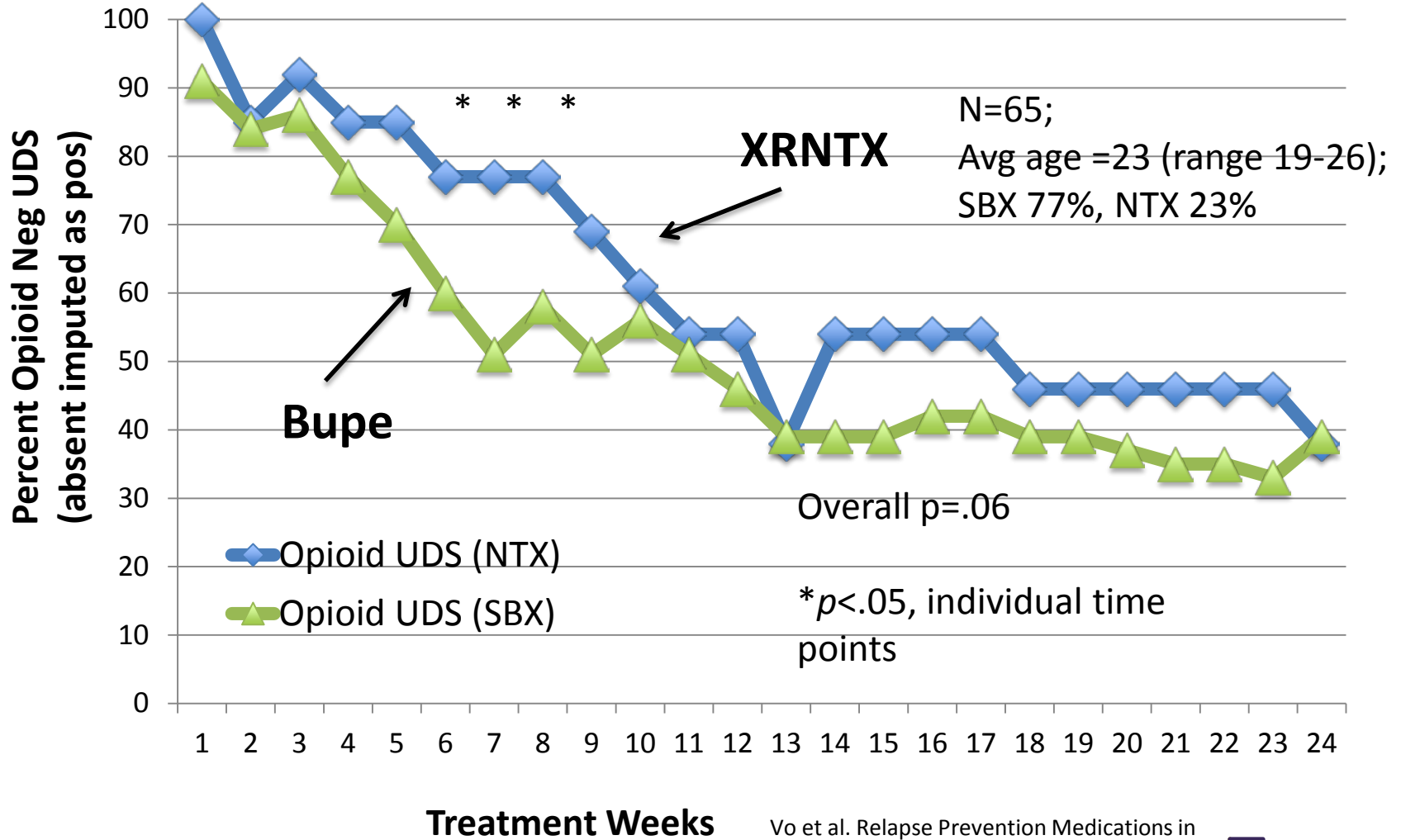
# YOUTH BUP OP LONGER TERM RETENTION



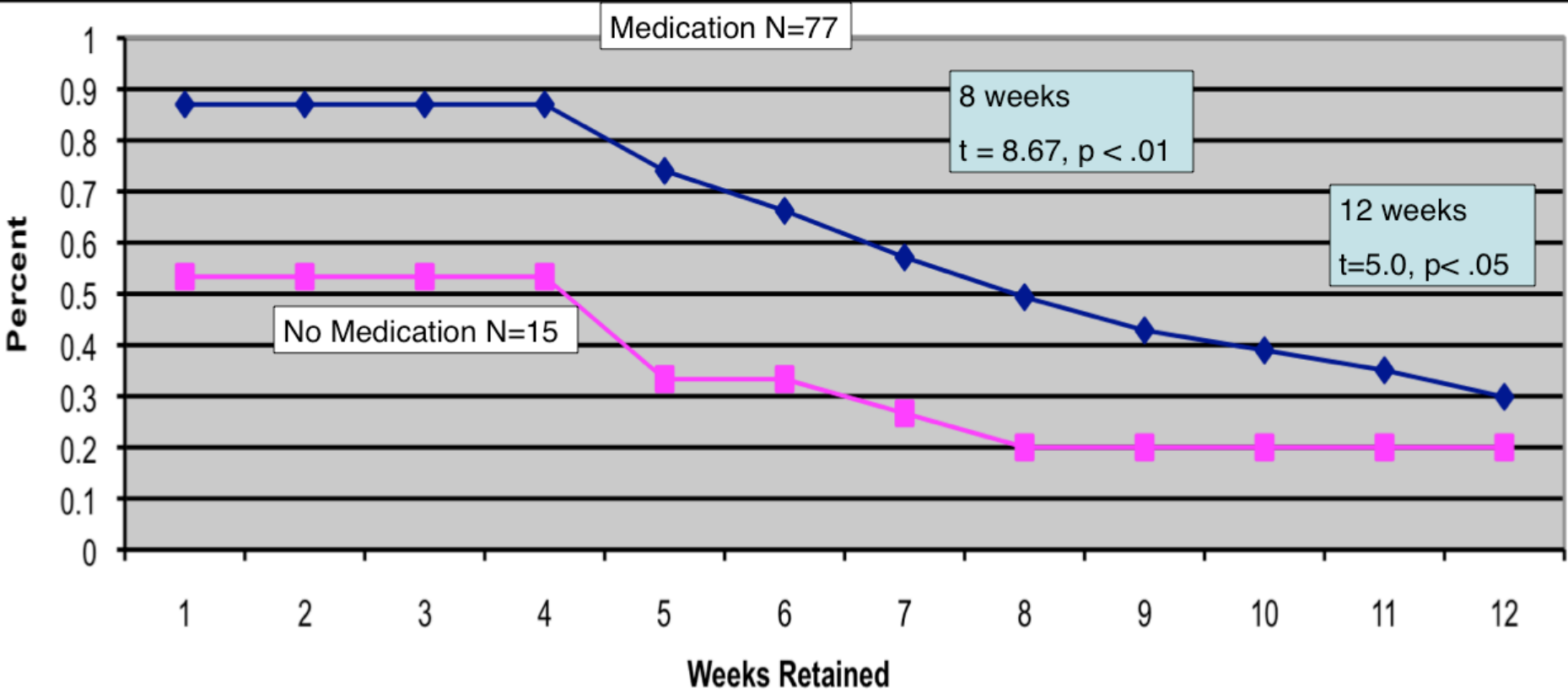
Matson et al.

*J Addict Med.* 8:176-82.2014

# YOUNG ADULTS ENROLLED IN SPECIALTY IOP



# Adolescents and young adults referred to co-located IOP Linkage and retention: Medication (bup or xrntx) vs no medication, naturalistic treatment



# Adolescents and young adults

## Referred from residential to multiple community providers

- Treatment received in acute residential (n=288)
  - XRNTX 28%, Bup 33%, No meds 39%
- Over 6 months following residential discharge low rates of MOUD use:
  - XRNTX: mean doses 1.8
    - 70% 1<sup>st</sup> dose
    - 17% 3<sup>rd</sup> dose
    - 7% 6<sup>th</sup> dose
  - Bup: mean days 57
- Leaving residential treatment on bup significantly associated with receiving MOUD at 3-mo compared to leaving on XR-NTX or no medications.
  - At 6-month follow-up, retention in treatment higher for the bup group than the no medication but not for the XR-NTX group..
- Self-reported opioid use was significantly lower for the XR-NTX group than the other two groups at 3 and 6 mo.
- Opioid positive tests were significantly lower for XR-NTX than the other two groups at 3 mo but not 6 mo

# NEW DIRECTIONS

Engaging families  
and assertive treatment



# YORS

## Youth opioid recovery services

- Family engagement
- Assertive outreach
- Home delivery of relapse prevention medications
- Contingency management: incentives for receipt of medication doses

# ASSERTIVE TREATMENT

- Well established for treatment of chronic illness in hard-to-reach populations in which medication adherence is a major barrier
  - TB, HIV, schizophrenia (ACT)

# FAMILY ENGAGEMENT: HISTORICAL BARRIERS

- Normative pushback against sense of parental dependence and restriction
- Clinicians: lack of training, competence, comfort
- Focus on internal transformation
- Preoccupying focus on “enabling”
- Over-rigid concern with confidentiality

# RATIONALE

- Both families and youth need a recipe for treatment, with role definitions, expectations, and responsibilities
- Families have core competence and natural leverage
- Encouragement of emerging youth autonomy and self-efficacy is compatible with empowerment of families
- Family mobilization – “Medicine may help with the receptors, persuasion may help with the motivation, but you still have to parent this difficult young person”

# FAMILY FRAMEWORK ELEMENTS

- Family education
- 3-way treatment plan, collaboration, and contract: youth, family, program
- How will family know about attendance and treatment progress?
- How will family help support attendance and treatment progress?
- How will family help support medications?
- What is the back up or rescue plan if there is trouble?

# PRINCIPLES OF FAMILY NEGOTIATION

## THE ART OF THE DEAL

- Pick your battles
- Know your leverage
- You gotta give to get
- You have more juice than you realize
- Keep your eyes on the prize

# ASSERTIVE OUTREACH

- Whatever it takes to make contact

# HOME DELIVERY

- Meet them where they are (literally)!



# POSTER CHILD?

- 21 M injection heroin, 5 inpatient detox admissions over 1.5 years, each time got 1<sup>st</sup> dose XRNTX but never came back for 2<sup>nd</sup> dose
- Lives with GM, team shows up with dose, he says no thank you, she says no not an option, done deal, gets 6 doses

# HOME DELIVERY

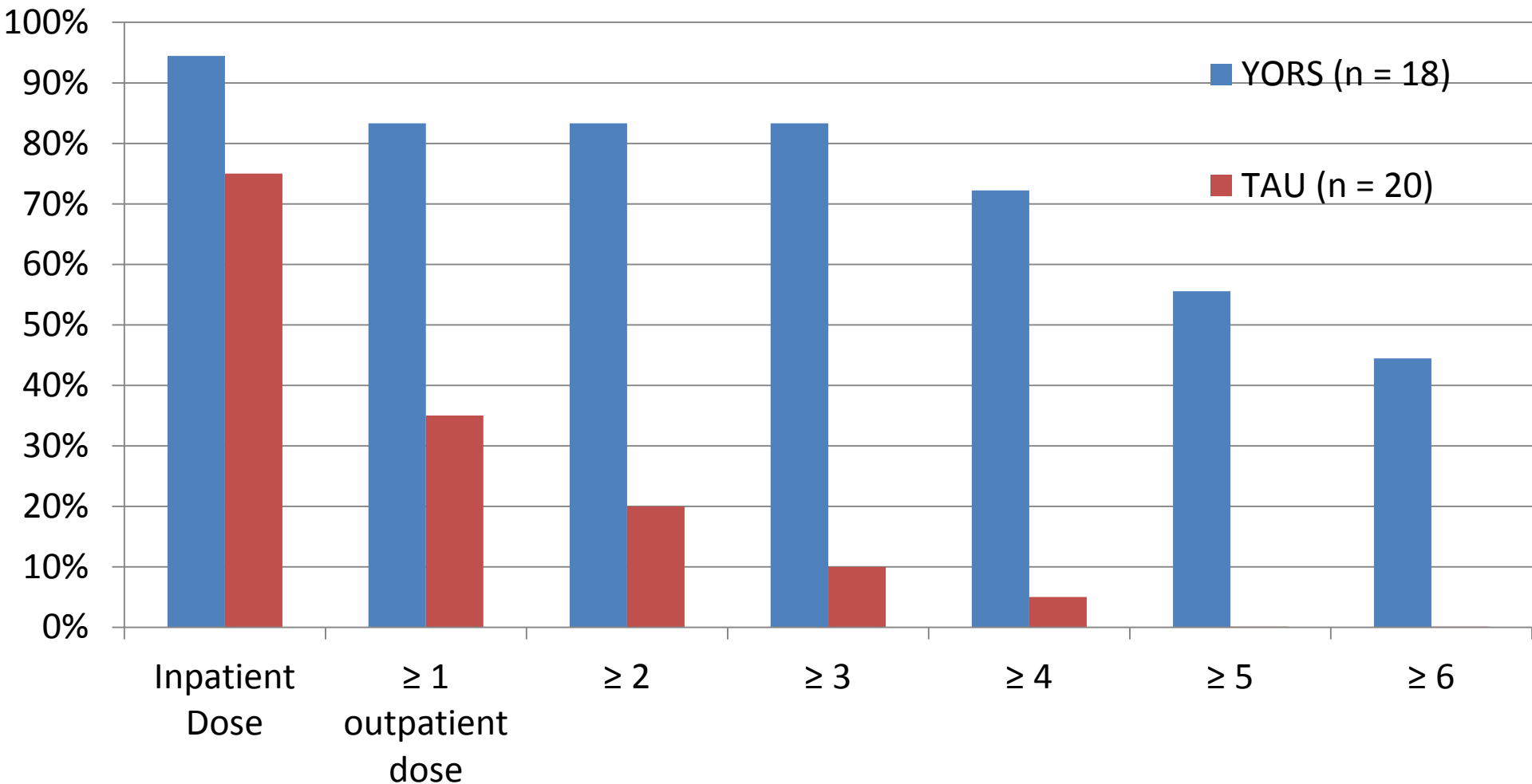
## (AND FLEXIBLE VARIATIONS ON THE THEME)

- Homes (many flavors)
- Recovery residences
- Other provider's residential detox program
- Hospital bedroom of partner during visiting
- Restroom at McDonalds, KFC, Taco Bell
- Abandoned building

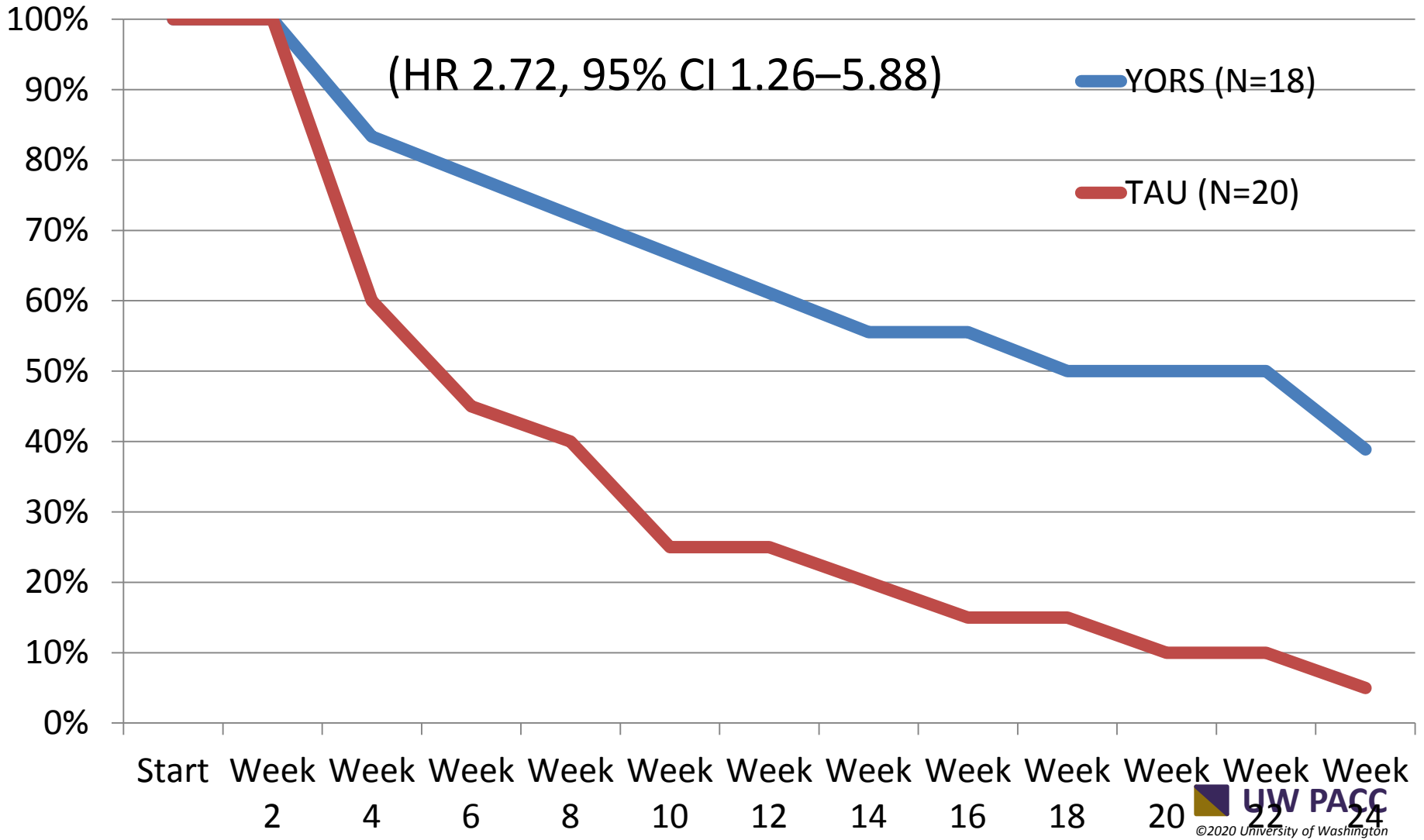
# PILOT RCT

- Ages 18-26
- Recruitment through index episode of acute residential treatment, with detox
- Randomization to YORS vs TAU
- 6 months duration
- N = 38

# RECEIPT OF CUMULATIVE XR-NTX DOSES



# OPIOID NON-RELAPSE SURVIVAL



# CONCLUSIONS

# CONCLUSIONS

## OPIOID ADDICTION TREATMENT FOR YOUTH

- Early intervention to prevent progression
- Specialty treatment for opioid addiction
- Developmentally-informed treatment
- Longitudinal treatment
- **Incorporate relapse prevention medications**
- Integrate into comprehensive continuum
- Involve families
- **More treatment!**

# WHAT'S THE ACTIVE INGREDIENT?

- Question:  
Which is better –  
medication or counseling or family intervention?
- Answer:  
Yes



# RECOMMENDATIONS

## LOW HANGING FRUIT

- Youth SUD providers should prioritize OUD treatment including use of MOUD
- Youth serving medical providers should identify OUD cases and treat with MOUD
- Typical upstream touchpoints should trigger assertive treatment outreach – OD, ED, medical hospitalization, psychiatric hosp

# RECOMMENDATIONS

## NOT-SO-LOW HANGING FRUIT

- Development of innovative approaches needed to improve engagement and retention, esp for high-severity, high-chronicity patients

# A CALL TO ACTION

- We are at a crossroads
- We have an existing and emerging toolbox but an alarmingly low level of adoption and utilization
- Therapeutic optimism remains one of our best tools!
- We are saving lives but we need to do better

# A CALL TO ACTION (AND HYPOTHETICAL MIRACLE CURES...)

