Frontiers in ED Addiction Care: Beyond Bup Starts

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CA BRIDGE

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Disclosures: Funding from SAMHSA, California Dept. of Health Care Services, NIAAA

Learning Objectives

Describe an approach to buprenorphine initiation in a person who uses fentanyl who presents in withdrawal

Name one ED intervention for people with alcohol use disorder

Name one ED intervention to reduce harms of stimulants

Session Overview

CA Bridge

ED bup starts in the era of fentanyl

AUD treatment

Stimulant use disorder treatment

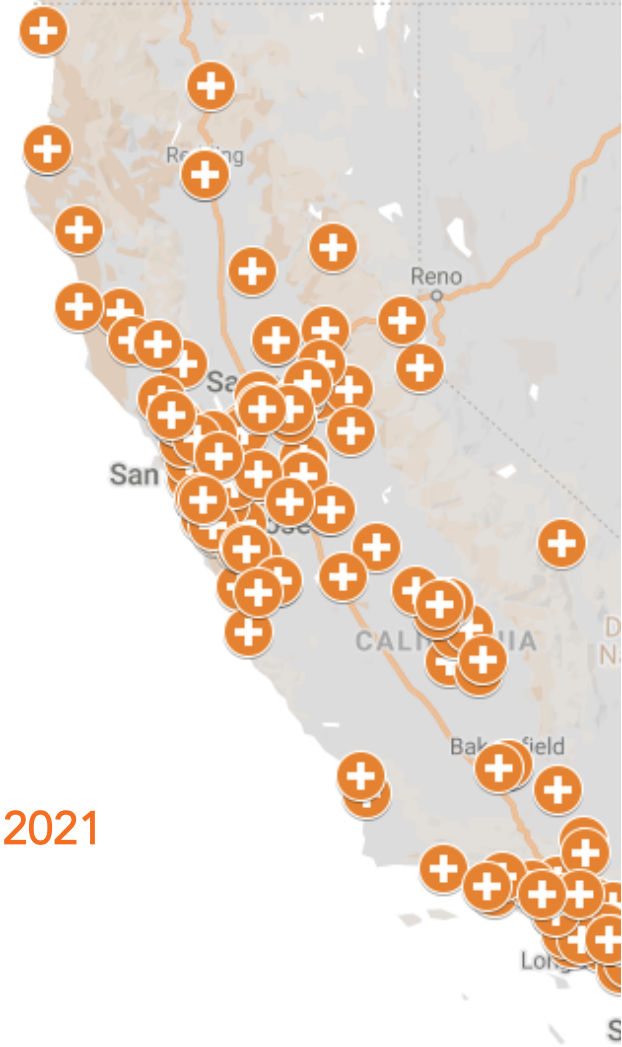
ED harm reduction

CA BRIDGE

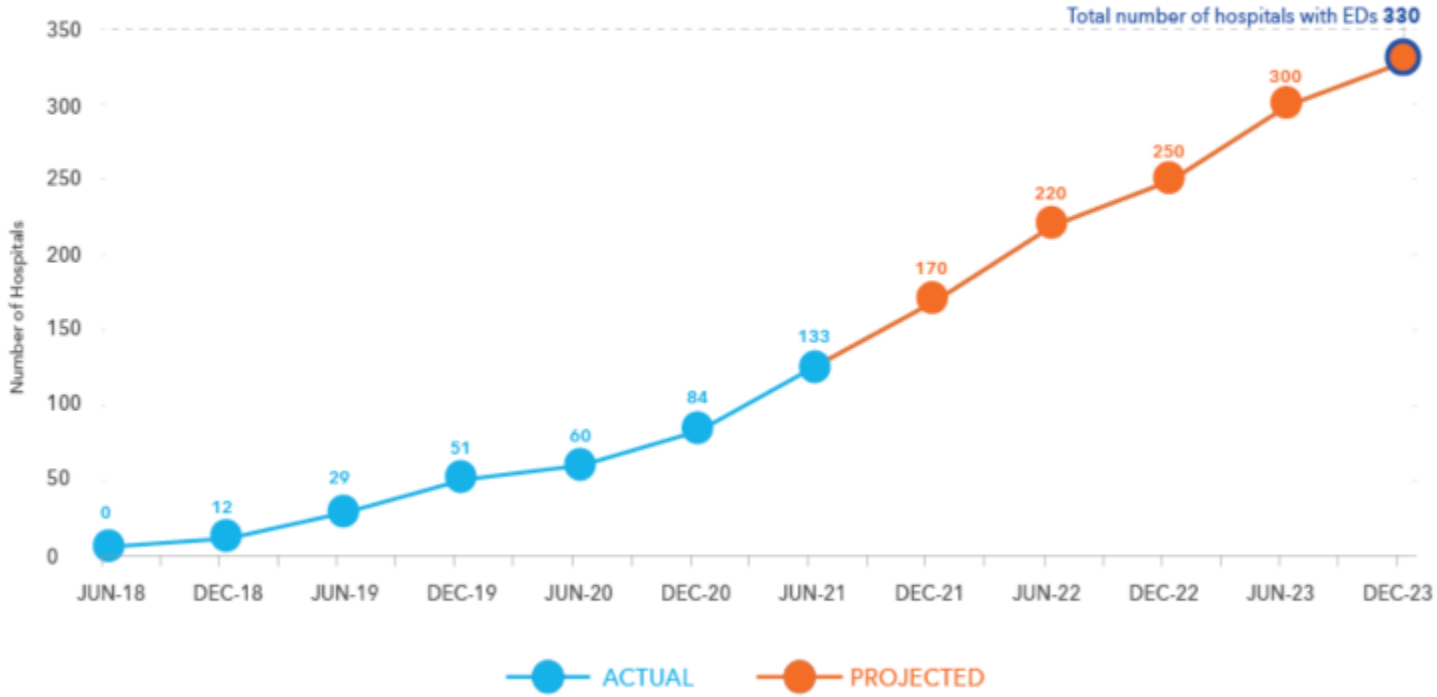
Goal: 24-7 access to high quality treatment of substance use disorders in all California hospitals by 2025

Impact: From March 2019 - July 2020 over 50 hospitals treated patients with substance use disorders

Update: 190 hospitals implement the CA Bridge model in 2021



Our goal is universal access to addiction treatment in all hospital emergency departments.



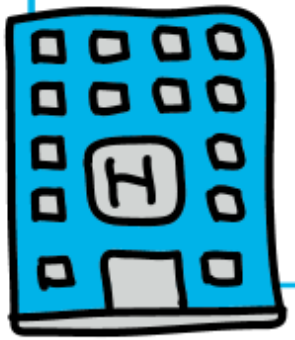
In 2018, the CA Bridge program began with just eight hospitals and today has expanded to 133.
By the end of 2023, we aim to see all hospital emergency departments treating opioid use disorder.

Medication for Opioid Use Disorder Hospital Implementation

CA BRIDGE

Here's how a diverse group of hospitals achieved rapid large-scale implementation of medication for opioid use disorder initiation.

Each participating hospitals is provided with support to do the following:



Identify Key Roles

Clinical Champion

Substance Use Navigator

Secure Funding

Hire Sustainably

Get Training and Technical Assistance

Experts are available every step of the way

CA Bridge helps hospitals implement the standard of care needed to support patients with substance use disorders. Together, a clinical champion and a substance use navigator bridge gaps in traditional treatment, linking patients to ongoing care.

The CA Bridge Model in Action

The clinical champion provides assistance to staff so they can support the patient with medication

The substance use navigator offers the patient guidance and linkage to ongoing treatment

The patient gets evidence-based care with better outcomes, and lower readmissions

Treatment starts here. Treatment starts now. CABridge.org

CA Bridge Model

Revolutionizing The System Of Care

Low-Barrier Treatment

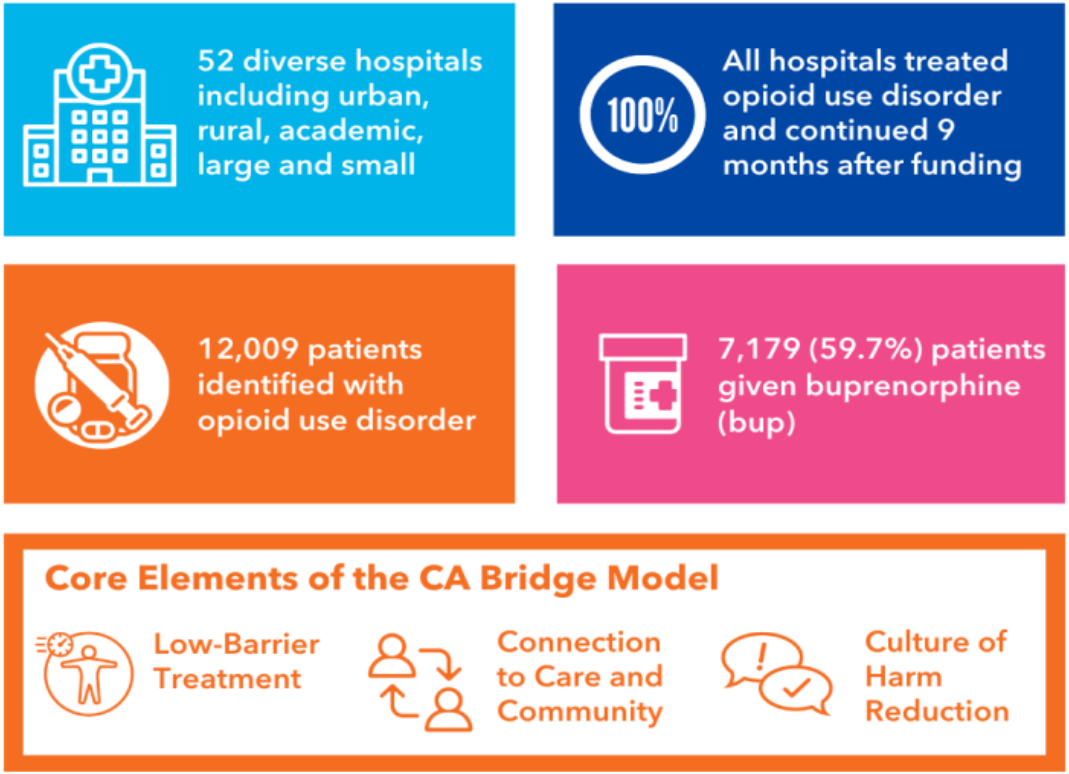
Connection to Care
and Community

Culture
of Harm Reduction

All Hospitals Can Implement Addiction Treatment

CA Bridge: Feasibility and Scalability of Hospital Initiation of Buprenorphine

Data Collected May 2019 – February 2020



Snyder H, Kalmin MM, Moulin A, et al. Rapid Adoption of Low-Threshold Buprenorphine Treatment at California Emergency Departments Participating in the CA Bridge Program. *Annals of emergency medicine*. August 2021. doi:10.1016/j.annemergmed.2021.05.024

CA Bridge Impact: To-Date

Cumulative totals across all reporting CA Bridge sites (n = 193), April 2019-Nov 2021

94,574

SUN encounters

76,267

patients identified with OUD

32,204

encounters where MAT was prescribed or administered

SUN: Substance Use Navigator
OUD: Opioid Use Disorder
MAT: Medication for Addiction Treatment

Patients Served

Patients with OUD + buprenorphine administered

- 52.9% White non-Hispanic, 22.4% Hispanic/LatinX, 19.7% other/unknown, 5.1% Black non-Hispanic
- ***79.7% Medicaid***, 5.7% Medicare, 4.5% uninsured
- 49.2% stable housing, ***35.2% unstable housing***
- 34.2% use methamphetamines

Italics=associated with increased odds of buprenorphine

Kalmin MM, Goodman-Meza D, Anderson E, Abid A, Speener M, Snyder H, Campbell A, Moulin A, Shoptaw S, Herring AA. Voting with their feet: Social factors linked with treatment for opioid use disorder using same-day buprenorphine delivered in California hospitals. Drug Alcohol Depend. 2021 May 1;222:108673. doi: 10.1016/j.drugalcdep.2021.108673. Epub 2021 Mar 18. PMID: 33773868; PMCID: PMC8058318.

Q&A

ED Bup Starts in the Era of Fentanyl

Case *Sandra, 28 year old female*

Subjective

28 yo F w methamphetamine and opioid use disorder, presenting in withdrawal. Smokes fentanyl 1.5 g often with methamphetamines, no benzos/EtOH. Previous positive experience with bup. Last use of fentanyl approx 24 h prior

Objective

T37, HR 118, BP 135/90, RR 15, O2 98% on RA
Mydriasis, restless, rhinorrhea

Assessment & Plan

Administered buprenorphine 16mg SL

What is street fentanyl?

- Synthetic opioid
- Not detected on most urine drug screens
- About 40x more potent than heroin
- High affinity and high efficacy at mu receptor
- Single bolus has a short half-life
- Repeated use → accumulation in adipose tissue, decreased renal clearance, more mu opioid receptor desensitization
- Traits of California supply: often smoked (sold as fentanyl) or in pills (sold as other opioids), no xylazine

1. O'Donnell JK, Halpin J, Mattson CL, Goldberger BA, Gladden RM. Deaths Involving Fentanyl, Fentanyl Analogs, and U-47700 — 10 States, July–December 2016. *MMWR Morb Mortal Wkly Rep*. 2017;66(43):1197-1202. doi:10.15585/mmwr.mm6643e1
2. Kaiko RF, Wallenstein SL, Rogers A, Grabinski P, Houde RW. Relative analgesic potency of intramuscular heroin and morphine in cancer patients with postoperative pain and chronic pain due to cancer. *NIDA Res Monogr*. 1981;34:213-219.

Why would someone choose fentanyl?

- Fentanyl has a quick and very potent effect
- Fentanyl is less expensive than other street opioids
- Fentanyl can be smoked easily
- Some people will not go into withdrawal for days

1. Ciccarone D. The rise of illicit fentanyls, stimulants and the fourth wave of the opioid overdose crisis. *Curr Opin Psychiatry*. 2021;34(4):344-350. doi:10.1097/YCO.0000000000000717

Increasing reports of buprenorphine precipitated withdrawal merit caution

Most people in withdrawal can start bup without issue

In populations with 25-76% fentanyl use, 0-3% precipitated withdrawal (EMS, multi center NIDA, single site ED, multi site CA Bridge)

CA BRIDGE

Varshneya NB, Thakrar AP, Hobelmann JG, Dunn KE, Huhn AS. Evidence of Buprenorphine-precipitated Withdrawal in Persons Who Use Fentanyl. J Addict Med. 2021 Nov 23. doi: 10.1097/ADM.0000000000000922. Epub ahead of print. PMID: 34816821.

D'Onofrio et. al, unpublished abstract

Hern et al, unpublished data

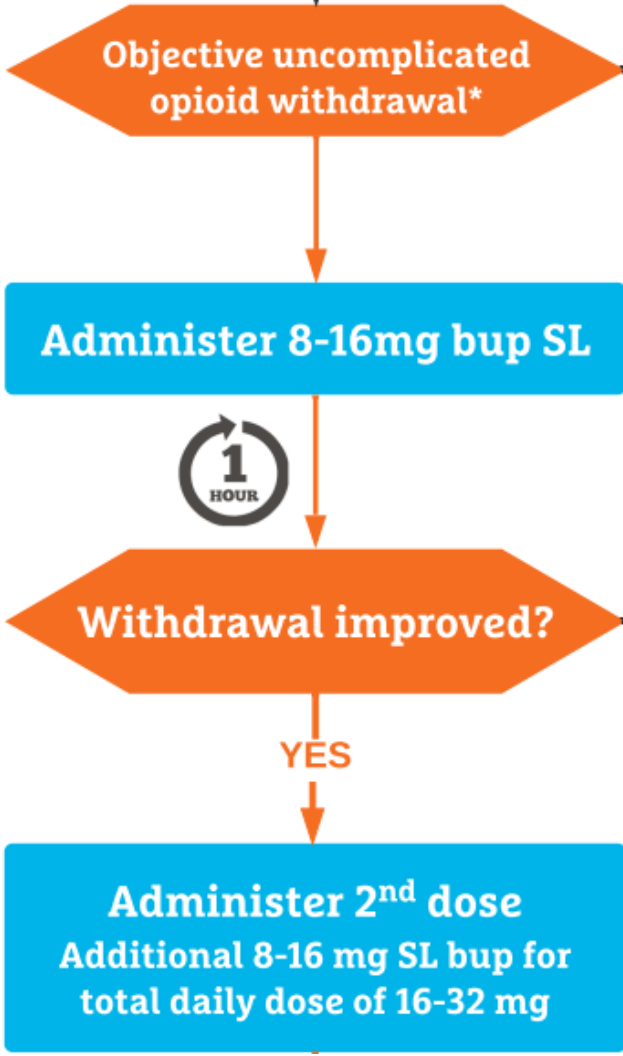
ZSFG, upublished data

Lesaint, unpublished data

D'Onofrio G, Fiellin D. Emergency Department-INitiated bupreNOrphine and VAlidaTIOn Network Trial (ED-INNOVATION) (NIH HEAL Initiative). Presented at: Second Annual NIH HEAL Initiative Investigator Meeting; May 17, 2021; Virtual Meeting.

ED patients in withdrawal

- Ensure patient has stopped all opioids
- Ensure objective evidence of withdrawal (will often who use fentanyl daily)
- Give a first dose of 8-16mg of buprenorphine
- Rapidly increase as needed up to 32mg or more



What is enough withdrawal?

Look for objective signs

Caution about using time since last use

Ask, “Do you think you are ready to start bup?” or “How bad is your withdrawal?”

Share what you know to empower patient decision

<u>If no objective signs of withdrawal or unclear:</u>

Offer home start w/ support during fentanyl washout

Consider morphine 30mg for mild withdrawal lorazepam 1-2 mg PO x 1 in the ED, transdermal bup, or prescribed adjuncts

Most cases: wait at home for severe withdrawal, start 8-16

May offer crosstaper/microdose

Case Outcome *Sandra*

Course

- After 16 mg dose, pt feels improved but still uncomfortable
- She is administered another bup 8mg

Disposition

D/C home with Rx for buprenorphine 16-24 mg qday x 3 d, in hand naloxone and next day appointment at the clinic

Precipitated withdrawal

- Bup 16mg SL -AND- PO benzodiazepine x1
- Repeat bup until mydriasis resolves
- If withdrawal persists, ketamine 0.3mg/kg IV slow push every 30 minutes until calm and light sedation. Hold for excessive sedation or dissociative symptoms

If no improvement or worse consider:

Undertreated withdrawal: Occurs with lower starting doses and heavy tolerance; improves with more bup (add'l 8-16 mg SL).

Other substance intoxication or withdrawal: Stimulant intoxication, alcohol/benzo/xylazine/GHB withdrawal. Continue bup; manage additional syndromes.

Bup side-effects: Nausea, headache, dysphoria. Continue bup, treat side-effects with supportive medications.

Other medical/psychiatric illness: Anxiety, sepsis, influenza, DKA, thyrotoxicosis, etc. Continue bup, manage underlying condition.

If sudden/signficant worsening, consider precipiated withdrawal: See box below.

1. Carroll GG, Wasserman DD, Shah AA, et al. Buprenorphine Field Initiation of ReScue Treatment by Emergency Medical Services (Bupe FIRST EMS): A Case Series. *Prehospital Emerg Care Off J Natl Assoc EMS Physicians Natl Assoc State EMS Dir*. 2021;25(2):289-293. doi:10.1080/10903127.2020.1747579
2. Herring AA, Schultz CW, Yang E, Greenwald MK. Rapid induction onto sublingual buprenorphine after opioid overdose and successful linkage to treatment for opioid use disorder. *Am J Emerg Med*. 2019;37(12):2259-2262. doi:10.1016/j.ajem.2019.05.053
3. Herring AA. Postoverdose Initiation of Buprenorphine After Naloxone-Precipitated Withdrawal Is Encouraged as a Standard Practice in the California Bridge Network of Hospitals. *Ann Emerg Med*. 2020;75(4):552-553. doi:10.1016/j.annemergmed.2019.12.015

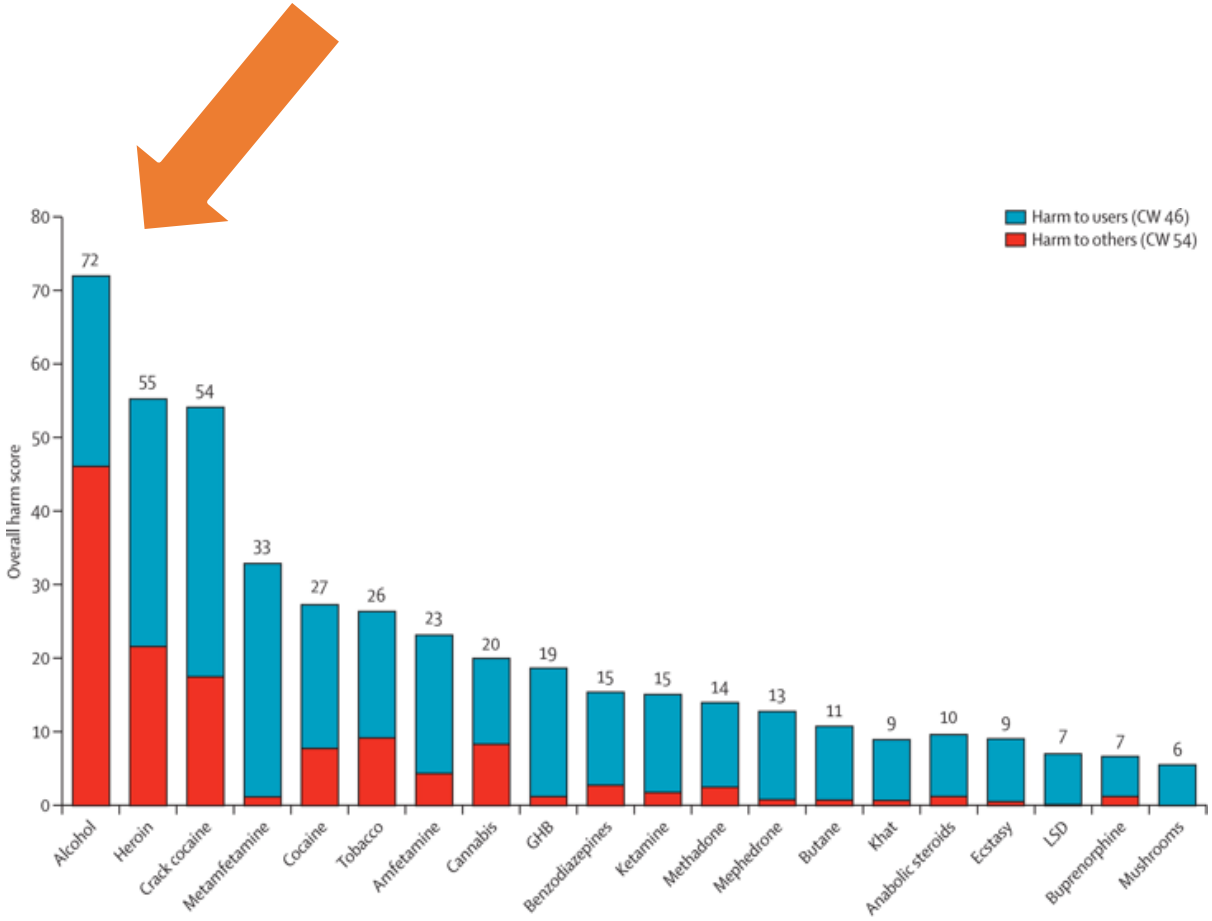
Q&A

Alcohol Use Disorder in the ED

- There were five million alcohol related ED visits in 2014
- This is up 61% from 2006

White et al 2018

Alcohol use causes *most* harm compared to other substances.



Nutt et al., 2010

Only **1 in 10** patients with AUD are ***treated***.

Only *half* are on medications for AUD.

Kranzler et al.

How do we best treat AUD in the Emergency department?

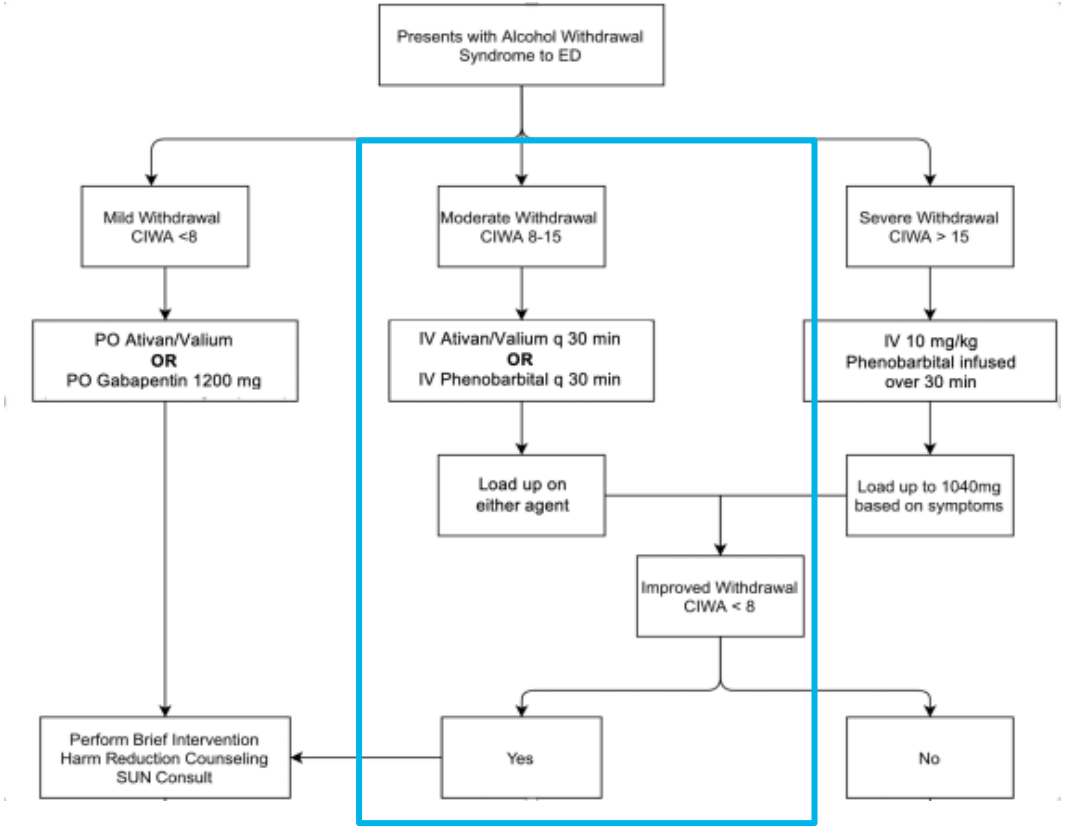
First, we treat the withdrawal state

…then we start medications for AUD

Case: Javier

- 33 year-old male (he/him)
- History of alcohol use disorder
- Last drink was 1.5 days ago
- “I need clearance so I can go to this sober living…”
- Shaking, sweaty, vomiting.

ED Alcohol Withdrawal Treatment



Javier

- His CIWA on arrival is 10
- He gets 10 mg of Valium PO x 3 doses
- His CIWA improves to 6

Gabapentin at Discharge

- Fewer cravings in withdrawal period compared to benzodiazepines
- Monotherapy option for mild-moderate withdrawal as outpatient
- NNT 5-6 for reduced heavy drinking days in recent randomized control trials
- Not indicated in severe withdrawal or renal failure

Javier

Script for Gabapentin 600 mg PO TID (fixed dose taper) for 7 days sent to pharmacy

Anton et al JAMA IM 2020. Myrick et al Alc Clin Exp Res 2009.
Bates et al Mayo Clin Proc 2020

Now let's add in medications for AUD

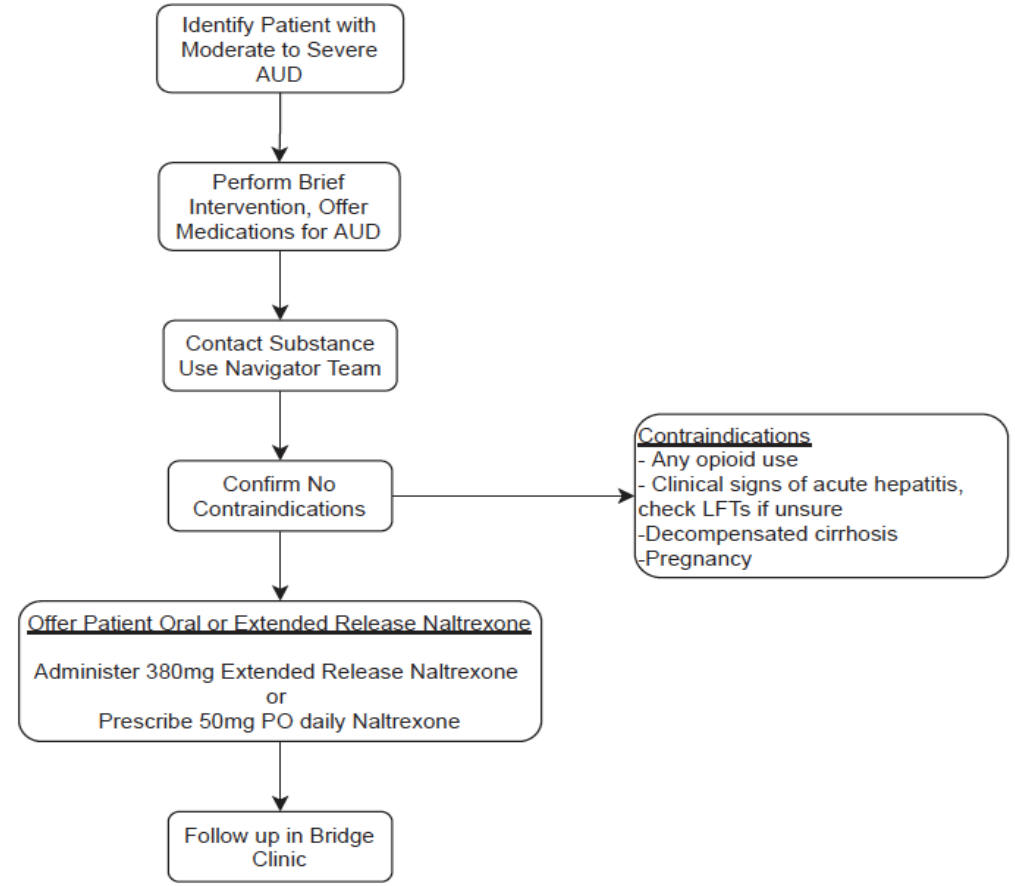
FDA Agreement

- Naltrexone (PO or IM extended release)
- Disulfiram
- Acamprosate

Off-Label

- Gabapentin
- Topiramate

Naltrexone For Alcohol Use Disorder (AUD) Algorithm



Anderson et al
Annals of Emergency Medicine
2021

- **59** patients were included in the treatment cohort.
- **41** got oral naltrexone and **18** extended release
- Of the PO group--**~10%** attended follow up
- Of the extended release group **~28%** attended follow up.

Case Conclusion: Javier

- He was seen by SUN and set up with a detox facility
- He was counseled on and amenable to starting extended-release naltrexone in the ED.
- His gabapentin prescription was picked up from pharmacy by ED staff and given to patient in hand prior to discharge
- He was given a ride to his detox facility

Q&A

Stimulant Use

Identificatio

Chief Complair

- Psychosis, danger to self/
- Abscess, rash
- Tremor, tics, “seizures”
- Itching, bugs, scabies, pa
- Agitation, sedation
- Trouble breathing
- Chest pain

elusional / neurologic

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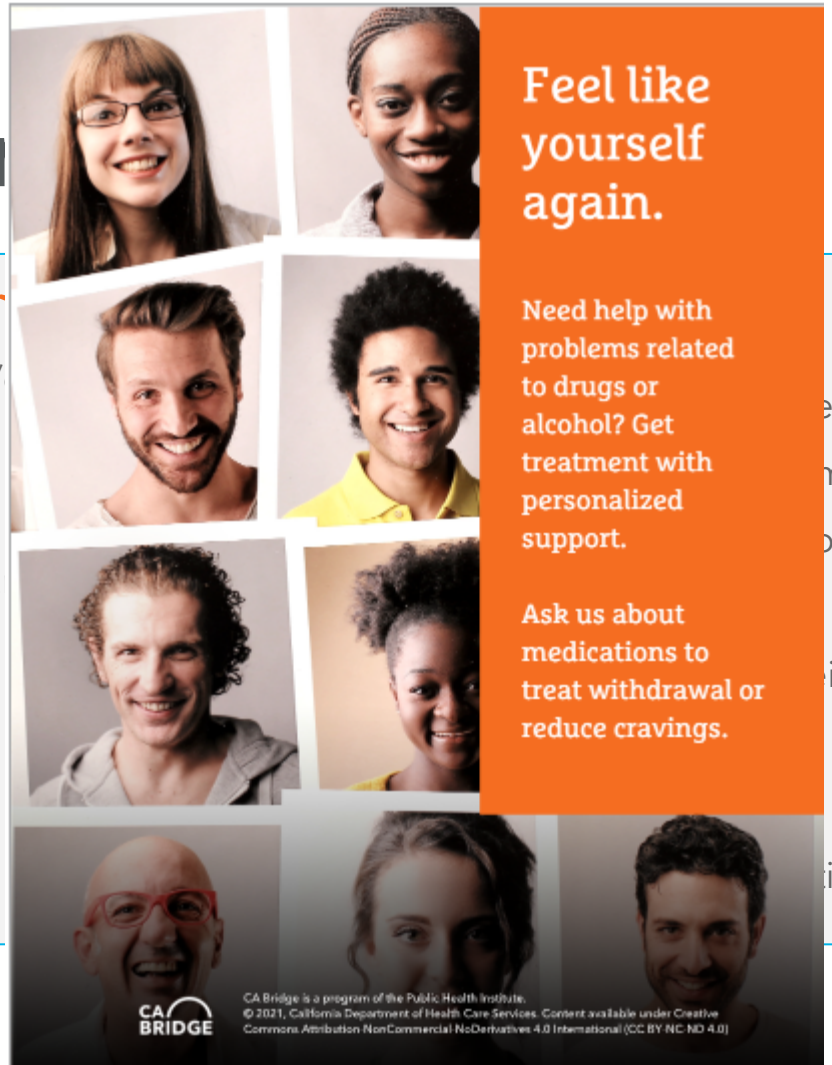


Acute Care Management

Mild Agitation

Navigator support

Food/drink

Quiet room

Nicotine replacement

Buprenorphine if OUD

Limited vitals

Significant Agitation (Broset > 1)

Verbal de-escalation, redirection

If able to take PO:

- Lorazepam 1-2 mg PO prn q6h
- Diphenhydramine 25-50 mg PO q8 prn
- Olanzapine 5-10 mg PO q6h

Maintenance Support

Offer olanzapine 5-10 mg BID prn “racing thoughts”

Reduce cravings–first dose in ED when calm:

- Mirtazapine 30 mg qhs
- Bupropion 300 mg XR
- ?Naltrexone PO or IM? If no opioid dependence

Linkage to bridge clinics, harm reduction services, contingency mgmt

Harm Reduction

Naloxone Distribution

93 hospitals

Supplies from California Naloxone Distribution Program

No prescription, no patient labeling, minimal logging

Distributed to any patient or visitor by any staff

State laws vary

ANYONE CAN SAVE A LIFE WITH NARCAN

ASK US FOR FREE NALOXONE (NARCAN) NASAL SPRAYS

Universal Overdose Precautions

Use with a buddy (never use alone hotline)

Test doses

Fentanyl test strips

Naloxone

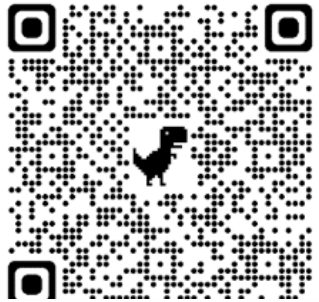
Safer Use Kits

Varies by hospital

Safer injection, safer smoking kits

Fentanyl test strip

Navigator or staff distribution, goal 24/7




PREVENT
Biohazard Infectious Waste
SHARPS CONTAINER
MEKESSON
Alcohol Prep Pad
Directions
LifeStyles
LifeStyles
LifeStyles


ALAMEDA
RN

Post Overdose Response

- Post naloxone buprenorphine starts if opioid dependence
- Naloxone distribution
- Navigator follow up call:
    - Ideally: caring contact + suicide screen + offer treatment

Final Takeaways

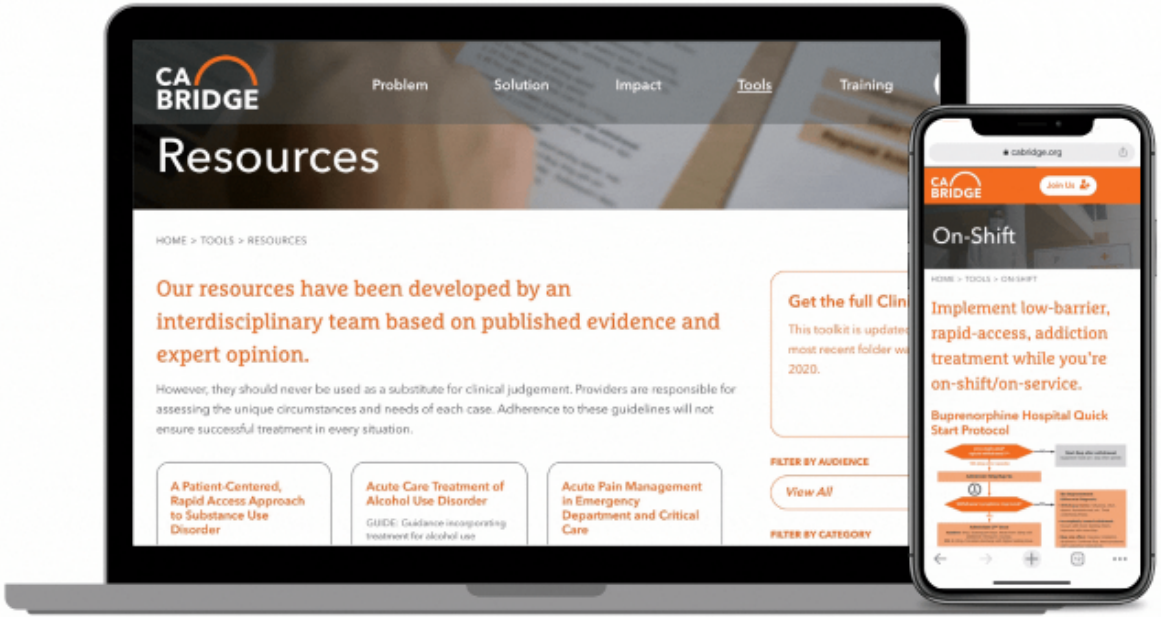
EDs are a great place for:

- Bup starts for patients in withdrawal
- Naltrexone starts for patients with AUD
- Naloxone and harm reduction supply distribution

24/7/365–reaching patients who aren't accessing addiction care

Q&A

Resources


CA BRIDGE
Problem
Solution
Impact
Tools
Training
Resources
HOME > TOOLS > RESOURCES
Our resources have been developed by an interdisciplinary team based on published evidence and expert opinion.
However, they should never be used as a substitute for clinical judgement. Providers are responsible for assessing the unique circumstances and needs of each case. Adherence to these guidelines will not ensure successful treatment in every situation.
A Patient-Centered, Rapid Access Approach to Substance Use Disorder
Acute Care Treatment of Alcohol Use Disorder
Acute Pain Management in Emergency Department and Critical Care
FILTER BY AUDIENCE
View All
FILTER BY CATEGORY
On-Shift
Implement low-barrier, rapid-access, addiction treatment while you're on-shift/on-service.
Buprenorphine Hospital Quick Start Protocol

Join us.

cabridge.org

Visit our website for tools and resources

cabridge.org/join-us

Join our email list for new announcements

@BridgeToTx

Request Technical Assistance

CA Bridge provides technical assistance to any hospital or health system seeking support to educate clinicians and health systems on medication for addiction treatment (MAT). Submit a formal request here.

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