

The Project LIFE program: Long-Acting Injectable Buprenorphine to End Overdose:



OPPORTUNITIES FOR ADDRESSING EQUITY IN SUBSTANCE USE
DISORDER TREATMENT IN OVERLOOKED POPULATIONS

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RUSH UNIVERSITY MEDICAL CENTER
PCC Community Wellness Center

Objectives

- ▶ Describe the current landscape of the overdose epidemic in an urban community.
- ▶ Analyze how harm reduction approaches can be of benefit to engaging patients in substance use disorder treatment.
- ▶ Gain confidence in practical low threshold long acting buprenorphine initiation for patients at high risk of overdose.

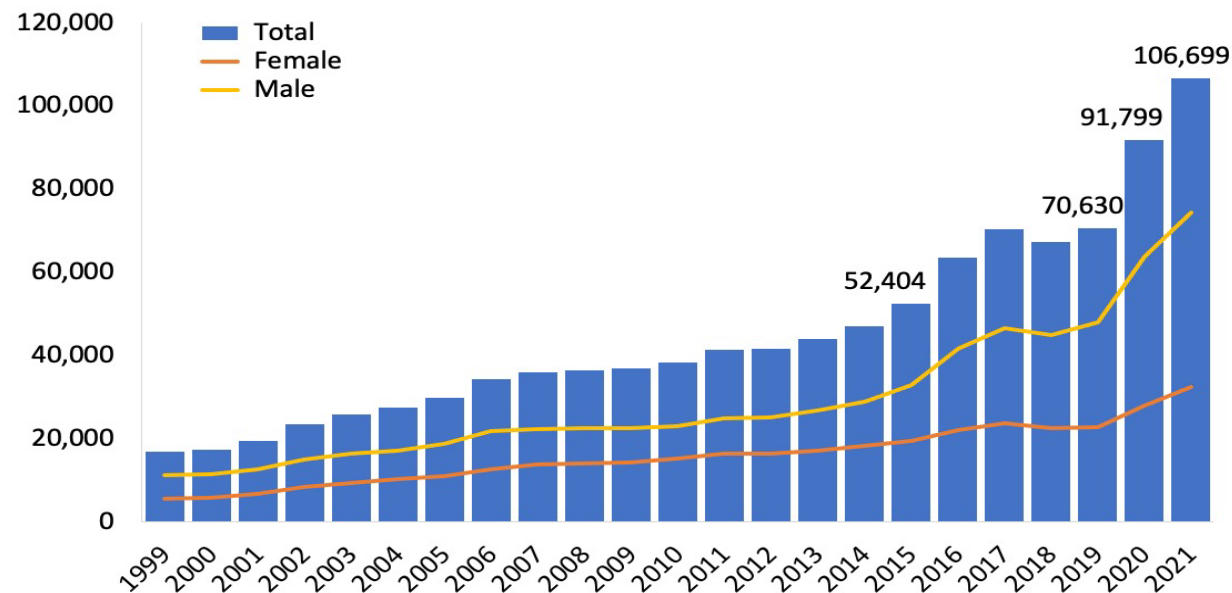
Disclosures:

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Drug Overdose Death Rates in the United States are Rising

- ▶ CDC data
- ▶ Fentanyl
- ▶ Stimulants
- ▶ *Treatment gap*
- ▶ *Role of FM*
- ▶ *Disagreements in US drug policy*

Figure 1. National Drug-Involved Overdose Deaths*, Number Among All Ages, by Gender, 1999-2021

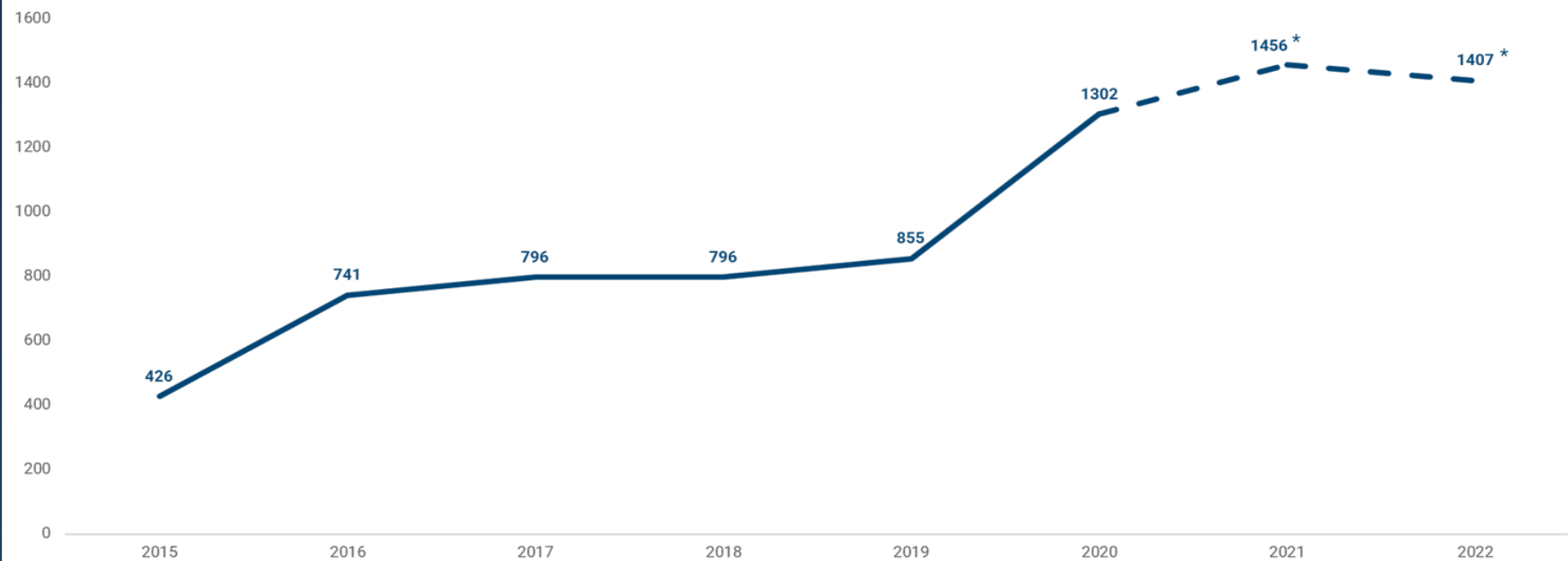


*Includes deaths with underlying causes of unintentional drug poisoning (X40–X44), suicide drug poisoning (X60–X64), homicide drug poisoning (X85), or drug poisoning of undetermined intent (Y10–Y14), as coded in the International Classification of Diseases, 10th Revision. Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999–2021 on CDC WONDER Online Database, released 1/2023.

The Addiction Crisis in Chicago



Opioid-related overdose fatalities citywide



Data from Cook County Medical Examiner Open Data Portal as of August 14, 2023. This data, particularly data from 2021 and 2022, is preliminary. Cook County Medical Examiner Data is available here: <https://datacatalog.cookcountyil.gov/Public-Safety/Medical-Examiner-Data>

Homicides Drop While Opioid Overdose Deaths Continue to Break Records in Cook County

Tue, 01/03/2023 - 12:00 Community

Medical Examiner's Office Releases Preliminary 2022 Data

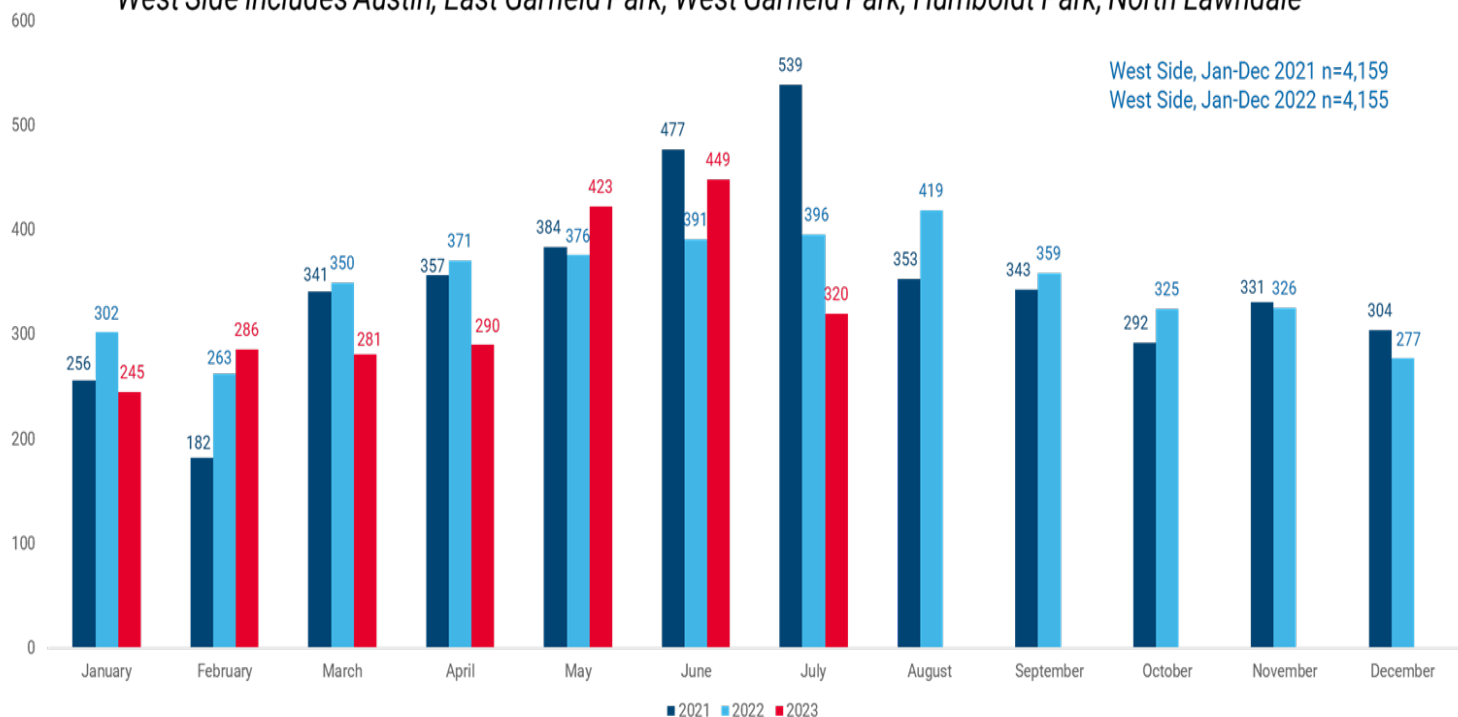


Year		Opioid Overdose Deaths		
2022		1,599*		
Year	All Homicides	Gun-Related Homicide	Chicago Homicides	
2022	927*	817*	740*	

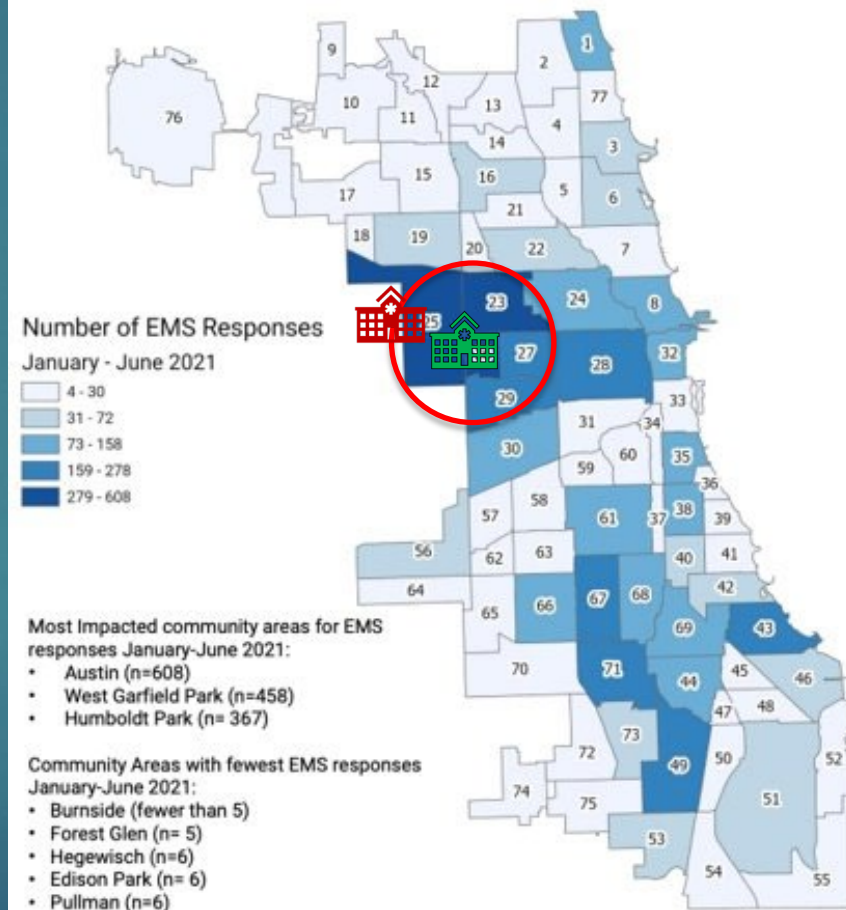
Inequity of Chicago's Addiction Crisis

Opioid-related EMS responses **West Side**, 2021 & 2022 & 2023

West Side includes Austin, East Garfield Park, West Garfield Park, Humboldt Park, North Lawndale



Data source: Chicago Fire Department

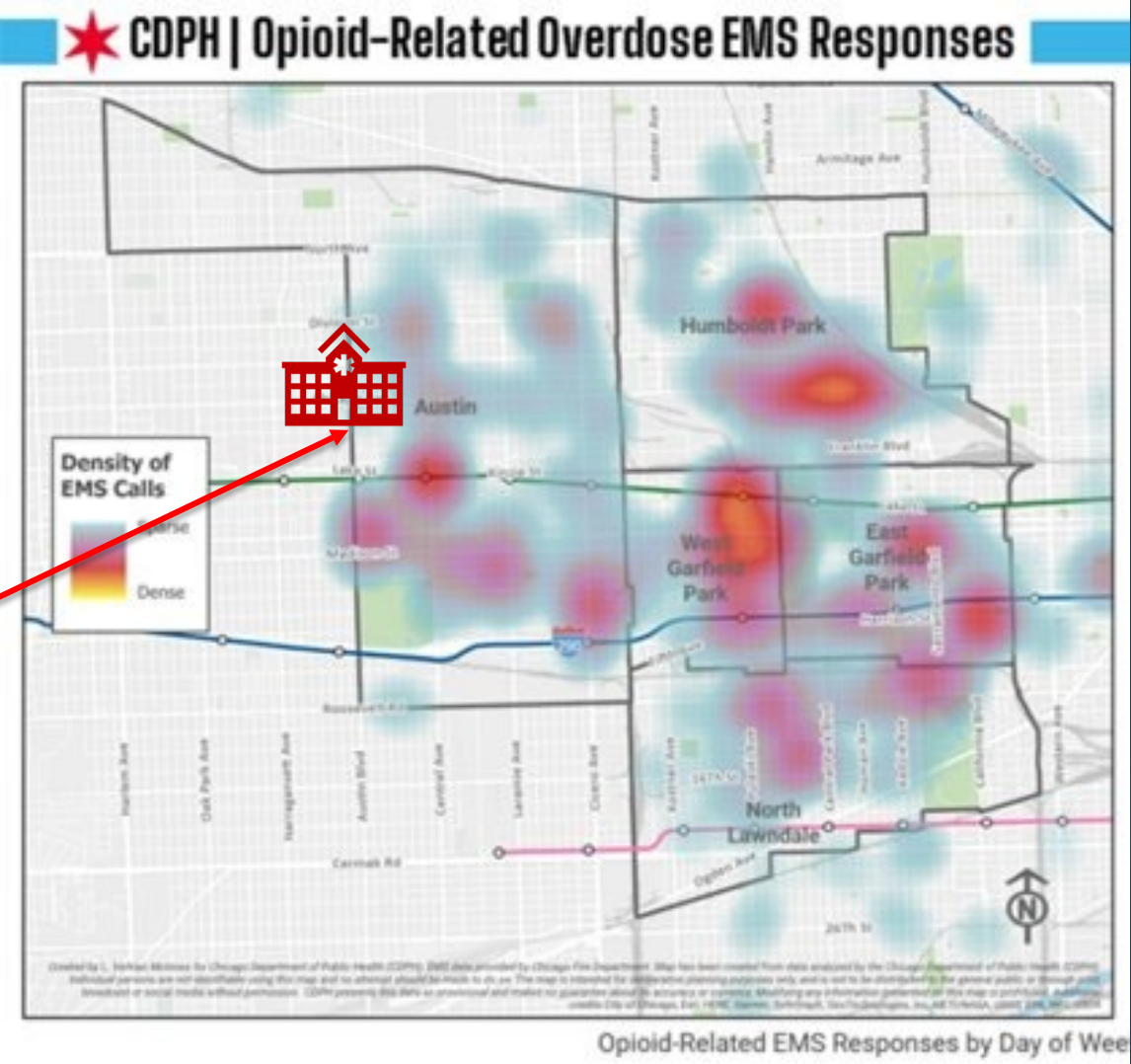


West Suburban Medical Center

CHICAGO SUN-TIMES

A 4-block radius on the West Side is at the heart of Chicago's opioid epidemic

By Tarveer Ali and Sam Charles | May 25, 2018, 4:25pm CDT



Illinois Statewide Fatality Rate by Race/Ethnicity 2021

Race	Fatality Rate (Per 100,000)
Non-Hispanic White	20.5
Non-Hispanic Black	60.8
Hispanic/Latinx	16.6
Non-Hispanic Other	3.0

Black patients with
OUD are

8.7x

less likely to receive
Buprenorphine after
non-fatal overdose
or other
complication of
OUD.

Treatment of Opioid Use Disorder

- ▶ Medications are FDA approved: Buprenorphine, Buprenorphine-naloxone (Suboxone); Methadone, and extended-release naltrexone.
- ▶ Evidence based for treatment of OUD; 2018 study from MA demonstrated that buprenorphine and methadone reduce all cause mortality.
- ▶ Numerous studies show meds are under-prescribed due to stigma, regulatory barriers, institutional barriers and lack of clinician training.
- ▶ The DATA 2000 waiver was eliminated in January 2023 allowing all DEA registered clinicians to prescribe buprenorphine.

Rising Overdoses Amongst Black Older Adults in Illinois

Table 5. Age-Specific Opioid Fatality Rate (per 100,000 capita) by Race/Ethnicity in Illinois, 2022

Race/Ethnicity	Age Group					
	< 25	25 - 34	35 - 44	45 - 54	55 - 64	65+
Non-Hispanic Black	8.6	49.3	76.6	131.3	207.0	69.2
Non-Hispanic White	4.7	36.8	44.9	31.8	20.2	11.1
Hispanic/Latinx	3.6	30.9	26.4	26.7	20.3	7.4
Non-Hispanic Other	2.7	9.7	8.7	4.1	2.2	1.7

Emerging Research: Treating Patients Post-Overdose in Hospital Setting

JAMA
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Research Letter | Substance Use and Addiction

Incidence of Precipitated Withdrawal During a Multisite Emergency Department–Initiated Buprenorphine Clinical Trial in the Era of Fentanyl

Gail D'Onofrio, MD, MS; Kathryn F. Hawk, MD, MHS; Jeanmarie Perrone, MD; Sharon L. Walsh, PhD; Michelle R. Lofwall, MD; David A. Fiellin, MD; Andrew Herring, MD

JAMA
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Research Letter | Substance Use and Addiction

High-Dose Buprenorphine Initiation in the Emergency Department Among Patients Using Fentanyl and Other Opioids

Hannah Snyder, MD; Brendon Chau, MPH; Mariah M. Kalmin, PhD; Melissa Speener, MPH; Arianna Campbell, PA; Aimee Moulin, MD, MAS; Andrew A. Herring, MD

Introduction

CA Bridge is an implementation facilitation program for opioid use disorder (OUD) treatment in California emergency departments (EDs).¹ CA Bridge guidelines include high-dose buprenorphine for most ED patients in withdrawal, with a starting dose of 8 to 16 mg.² Patients and clinicians have raised concerns that individuals using fentanyl may have suboptimal responses to buprenorphine compared with individuals who use other opioids.^{3–5} Although fentanyl may be consumed unintentionally by patients using contaminated drugs, California also has a substantial market for fentanyl sold by name, often for use by smoking.⁵ During data collection, 64% of California opioid-involved overdose deaths involved fentanyl.⁶ In this cohort study, we compared buprenorphine treatment initiation, response, and follow-up treatment engagement between patients who did and did not report fentanyl use at CA Bridge EDs.

+ Supplemental content

Author affiliations and article information are listed at the end of this article.



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ated with decreased mortality and morbidity,¹ yet the treatment
artments (EDs) offer an effective, low-barrier setting in which to
tive case series³ have raised concerns about increased incidence
ren buprenorphine is initiated in persons using fentanyl, a high-
affinity and slow dissociation from the μ receptor. With long-term
oaccumulation and prolonged metabolite excretion. As
rine inductions has eroded, alternative strategies, such as
arged, often prompting continued use of illicit opioids. Thus, there
from prospective studies using uniform surveillance and
eport the incidence of PW as part of an ongoing randomized
sublingual buprenorphine with CAM2038, a 7-day extended-

22%

6 Month Follow-
Up Rate

**B
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Health Justice Framework

Individual

Intersection of *policy, social, legal, and economic* determinants of health impact the individual community member

Necessary Disruption

Redistribute medical resources for community members most impacted by social and structural determinants of health

Community

- Prioritize greatest need communities
- Include community input in program development
- Dismantle the policies that do not align with health justice

Identify and overcome the specific policies that impede health equity and promote disparity.



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PROJECT
LIFE

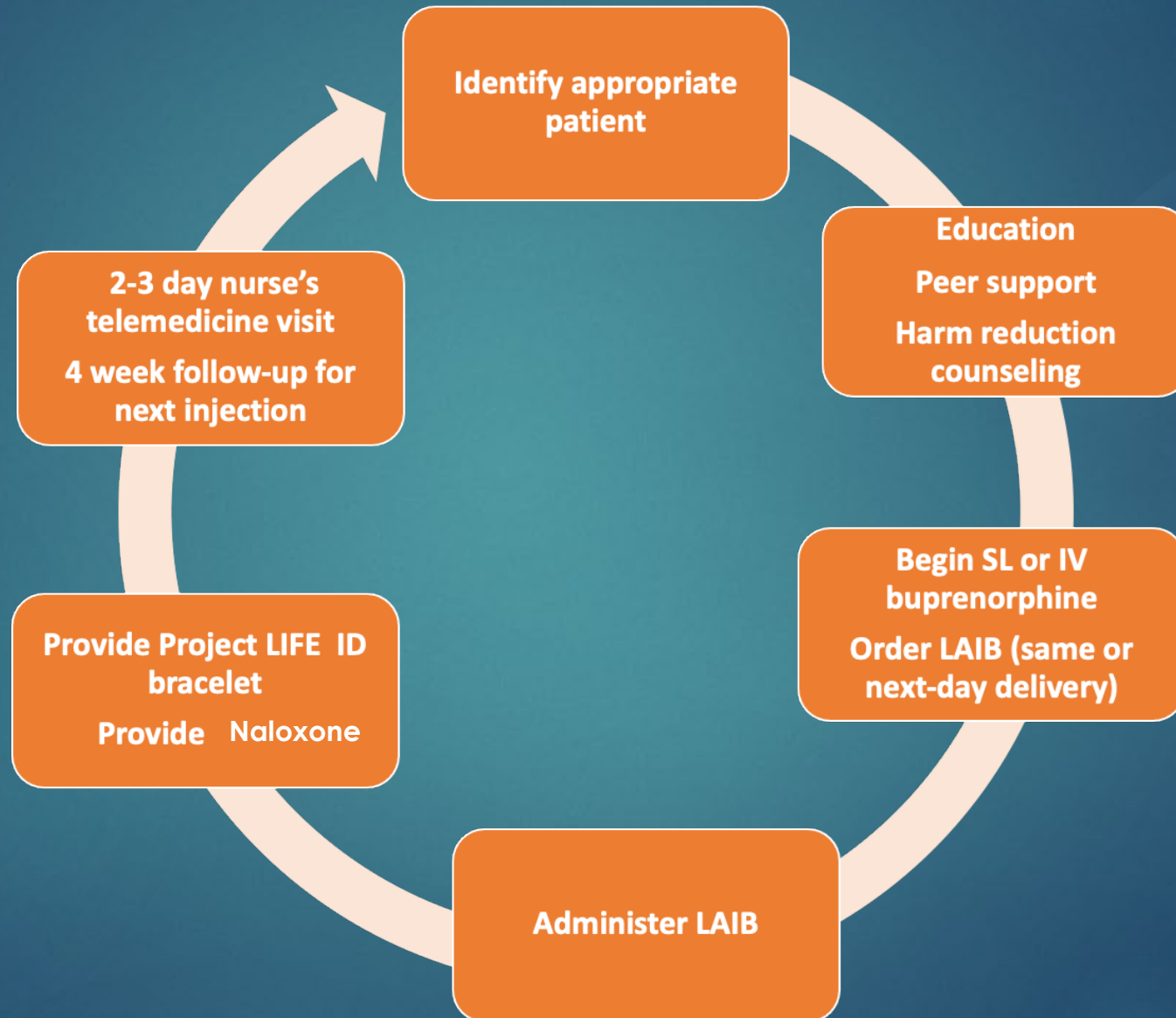


Long-acting
Injectable buprenorphine
For
Ending overdose

Inpatient rapid delivery and administration of long-acting injectable buprenorphine (LABI) for patients at high risk of overdose and death.

- ▶ Easier than SL buprenorphine
- ▶ Avoid rehospitalization for overdose and complications
- ▶ Engage in continuity care

Project LIFE Workflow



Our Team: Multidisciplinary Approach

Physicians

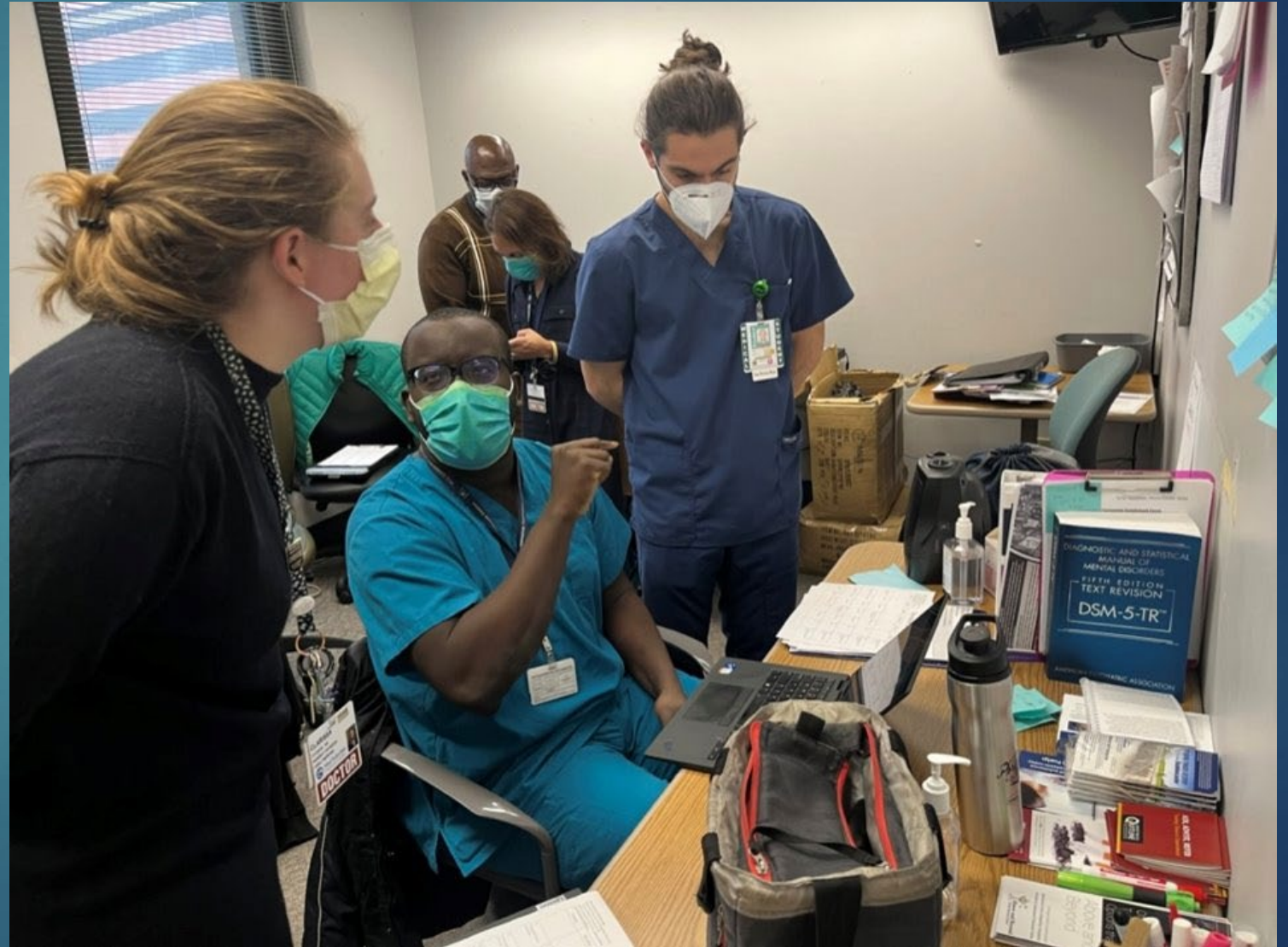
Nurses

Residents

Medical Students

Social Work

Peer Support



Project LIFE Patients

Opioid withdrawal or at risk of opioid withdrawal

Older adults = target population

Unstable housing

Persons with HIV who have unstable SUD

Postpartum patients prior to discharge

Post overdose patient s/p naloxone reversal

SNF Placement

History of leaving before medical treatment completed

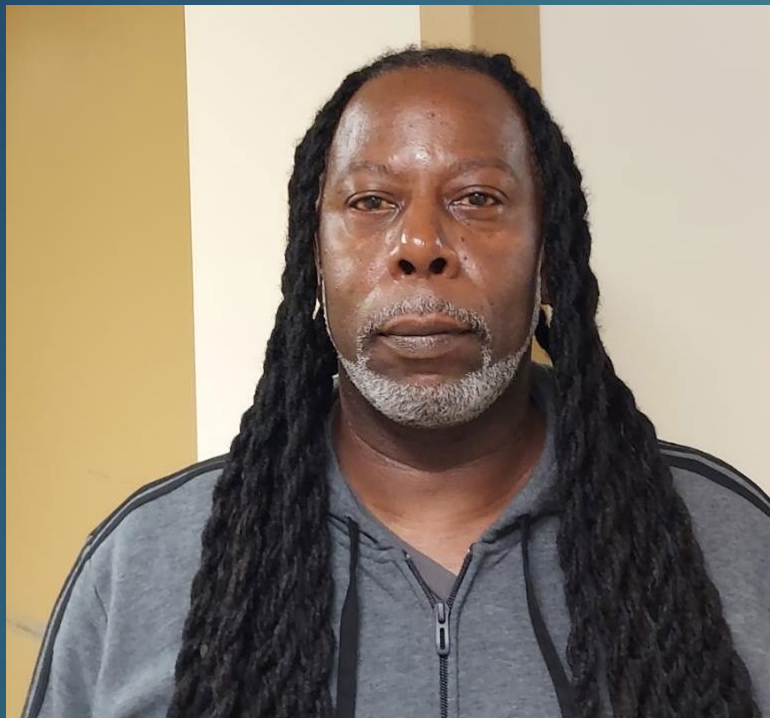
Methadone transitions:
*Cannot take methadone anymore or want to switch

SELECT pregnant patients – must meet criteria

Daily Courier; High Volume; Teamwork to Prevent Med Waste



Peer Counselors' Perspective



"In my view, long-acting buprenorphine has had the greatest impact in reducing deaths attributed to opiate related overdoses. It's a game changer because you can't recover from the grave."

– Tony Strong



"Long-acting injectable buprenorphine is an effective medication. That is a miracle changer. Changing individuals' maladaptive behaviors for the better."

– Darryl Clark

Pharmacy

- ▶ LAI Buprenorphine must come from a specialty pharmacy (due to REMS)
- ▶ Partnership with local specialty pharmacy offering daily delivery—now working on 340b partnership.
- ▶ **Our process: (once a pt agrees to LAI Buprenorphine)**
 - ▶ Order LAI Buprenorphine in EMR and send electronic RX.
 - ▶ **Managing administrative complexities:**
 - ▶ 1. DEA of prescriber address should match where LAI Buprenorphine is delivered to.
 - ▶ 2. Order must come from that address as well (the address on EMR).
- ▶ LAI Buprenorphine delivered to PCC (clinic, co-located in hospital)
- ▶ LAI Buprenorphine picked up by Addiction Medicine team and brought to inpatient pharmacy. An order is placed on the hospital EMR for a "home med"
- ▶ Inpatient pharmacy puts sticker on medication for inpatient administration
- ▶ LAI Buprenorphine scanned by RN and administered to pt.

Induction Approaches:

Low-Dose Buprenorphine to LAIB (1 day)

IV Buprenorphine

0.1 mg IV q3 hours ; start induction early in AM.

Full agonist

Oxycodone 10-20 mg PO q4 hours scheduled

LAIB

LAIB 300 mg SQ in mid afternoon.

As needed

lorazepam, clonidine, ondansetron

Evaluation of Project LIFE

- ▶ 2 IRB-approved research studies
 - ▶ Retrospective chart review
 - ▶ Qualitative study/patient centered outcomes.

Research team: residents, Rush medical students, collaborators from Mount Sinai (NYC)-- Dr. Ethan Cowan and Dr. Siri Shastry

Inpatient Initiation of Long-Acting Injectable Buprenorphine At a Community Hospital: A Retrospective Case Series

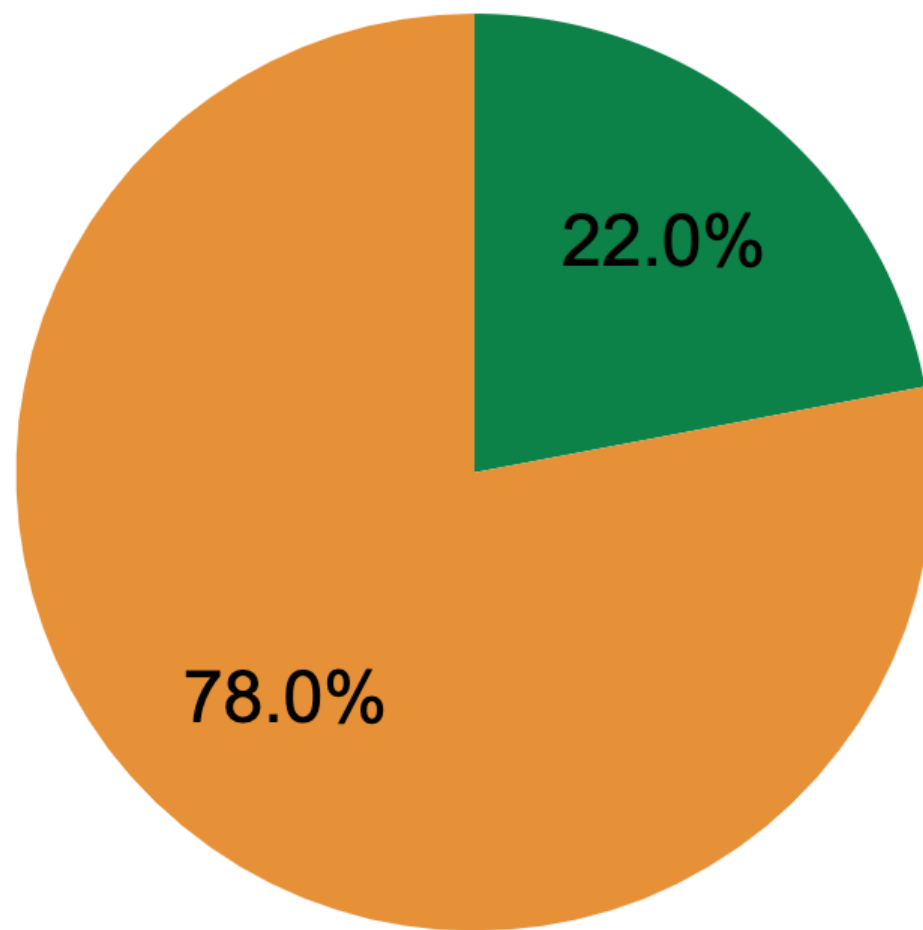
Primary Outcome: hospital follow-up appointment attendance

- ▶ First 46 patients to receive LAIB at WSMC
- ▶ August 4 - December 28, 2022
- ▶ Manual data abstraction from inpatient and outpatient EMRs
 - ▶ Demographic information
 - ▶ History of OUD
 - ▶ Prior MOUD
 - ▶ How long on SL or IV-BUP before injection

Results:

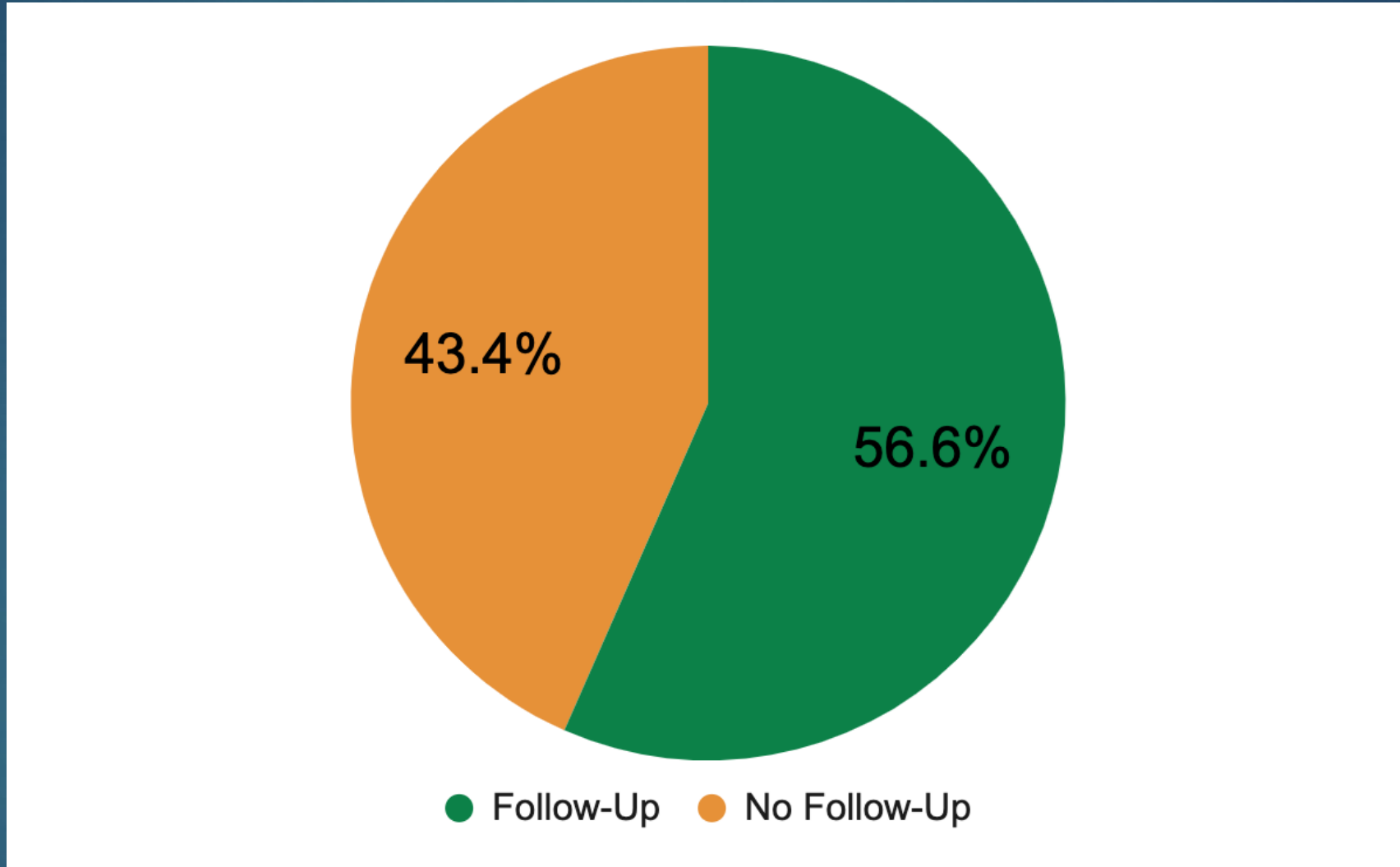
Age, mean (range)	57 (29-71)
Female, n (%)	24 (52%)
Race, Black, n (%)	42 (91%)
Medicaid, n (%)	39 (86.7%)

Before Project LIFE Started:



● Follow-Up ● No Follow-Up

Results:



- ▶ 48% of patients received more at least one additional LAIB injection after discharge

Patient Perspectives on Hospital Initiation of Long-Acting Injectable Buprenorphine

Methods:

- ▶ 18 patients who received LAIB while hospitalized were interviewed
- ▶ Two researchers independently coded the transcripts using an iterative, open-coding approach
- ▶ Key themes and quotes were analyzed by the research team

Demographics:

- ▶ Median age: 59
- ▶ 95% Black

Key Themes:

Hospitalization

“I didn't never even know anything about [LAIB] until I got here.” *(Participant 7)*

“Yes. I wish I did start it early. I wish I knew about it, instead of coming to the hospital to find out about it, you know, I would've did something different.”
(Participant 14)

Peer Support

“Darryl was the one who influenced me to get the shot. He spoke to me and you know, about his past and, you know, his, his, you know, his journey, what he'd been on and stuff, that road he been on, and you know how he got himself back up on his feet and stuff, you know, where he was and what he was doing and things.” *(Participant 19)*

“I talked to a guy when I was in the hospital and he called me a couple of times on the phone. So he gave me a lot of moral support about the [LAIB]. He gave me a lot of moral support because I was like leaning towards against it at first. And he was like, well, just give it a try, you know? So I, he was very helpful to me for that.” *(Participant 14)*

Counseling

“They asked me to get it, I took it. And then when I came back, this guy, she was trying to give it to me. The lady was trying to get me take it too. It's like, I just didn't want trust her. I ain't remember you took two shots. It was one. She kept telling me, you gotta take one shot, the lidocaine or something so it won't hurt or something... That kinda made me didn't wanna mess with it too.” *(Participant 10)*

“At first I did, but I know they was just trying to help me.” *(Participant 11)*

“He was explaining, you know, explaining it to me. I was like, I was still sick and in pain, you know, at the time when he was telling me so I really wasn't hearing what he was saying. And you know, but he asked me, he told me he was going to give me the shot and I was like telling him, no, let me wait for a minute. Let me wait for a minute. And you know, he just forced it upon me and just did it anyway, so. I didn't like that because I asked him to wait. Right. And he did it really without my approval at the time.... Well I guess it turned, it didn't cause any problems, so turned out better.” *(Participant 18)*

Drug Supply

“I'm not really good with trying new things, but I said give it. You been trying this, they got fentanyl. I never had fentanyl. Down here fentanyl taking people out left and right. You might as well try this here. You try the fentanyl.”

(Participant 3)

Overdose

“I wanted to stop using drugs because my friend OD'ed off of it and that could have been me. So it scared me, you know, when you wake up next to a person that's dead, it do something to you, so that's what made me want to get clean.”

(Participant 7)

Benefits

“I got grandkids now and I retired and I'm able to wake up and tend to my grandkids normally, not wake up and all while I got to get this and do it. And so I can feel normal.” *(Participant 6)*

“I feel so much better now. I'm eating right and everything.” *(Participant 5)*

"I never heard of this. A lot of people have it, but I never heard of it. But now that I know I'm gonna let many people I know possible cause it's lifesaving."

"This 30 day shot, it'll pick you up. It works wonders. It makes you feel whole and human again."

"They told me what they expect and what it was gonna do. And I was like, he must have just came up with this because, uh, only times I been using for these 40 years, I never heard no physician tell me I got something that might help you from killing yourself. Furthermore, keep you alive and keep you from ODing and then will not have you craving, sitting there about to jump out your skin to get a fix. Okay. So I said, it can't be no worse than what you already been through. So I said, give it a drive."

"It feels like I have never done drugs before"

"You got a chance to basically feel normal for a change."

"I recommended to one of my friends, he come down he started the shot what, maybe about two weeks ago. Told one of my friends that was using to come up to West Suburban to get their shot. He came and started on the shot."

"No, I haven't used since I took the shot since I've been out. Like I said, I haven't smoked a cigarette. I haven't had a craving or used or nothing like that."

"And now it's up to me to take advantage of the shot before the heroin kills me. And the shot trying to save me. And then I got a support team behind the shot. I don't have nothing behind the heroin, but the dope pusher, just trying to get my money from my pocket. Now with the shot, I'm keeping my money in my pocket."

"I feel like the shot is stronger. Like, I don't know how to explain it. I just like, I don't have like the thought like thoughts and cravings. Like I just feel good and energized and like I could do things and that's, that was my problem with the methadone. I had no motivation and I was tired all the time and depressed. So because I was so tired, I was, I couldn't do anything and it made me in a depressed mood and then I wanted to use. So it's nice just to have energy."

Long Acting Injectable Buprenorphine Considerations

Health Justice is not achievable without addressing:

Restricted distribution REMS medication	Requires specialized process to obtain med.
Cold storage - sometimes arrives warm	Safety net settings unable to set up formulary or buy and bill due to cost
Prior Authorization or refusal to cover medication - Commercial insurance may not cover; very limited options for uninsured	Many Medicare pts; or patients on brink of going on Medicare→many patients go without the med.
Painful especially for the malnourished and thin person	We often run out of injection sites for our thin patients and recognize that in thin patients, it may be less effective
Dose may not be sufficient for people who use IV fentanyl or patients who are use heavily; use of other substances.	Unable to give higher doses, or a second dose within 28 days. Seeing uptick in overdose.
Delivery setting: Health care only	No mobile options; no home health options

NEWS

Project LIFE: Long-acting injectables to stop surging opioid deaths

By Nell Salzman

Chicago Tribune • Published: Sep 18, 2023 at 5:00 am



Gratitude

Our patients and their families

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