

Managing OUD with Co-Occurring Mental Illness in Primary Care

Who Gets Better, Who Needs More, and How to Help Them

Katherine E. Watkins, MD MSHS RAND Corporation

Addiction Medicine and Pain Conference Montana Primary Care
Association, 2026 Funded by NIMH (U01MH121954)

Disclosures



No conflicts of interest



Funding: National
Institute of Mental Health,
U01MH121954



Some work is preliminary
findings under review —
not yet published

Agenda

Why primary care?

The CLARO study—
Collaborative
Care for Co-
Occurring
Disorders

Can we predict
who will do
well (and who
is unlikely to)
in primary
care?

Clinical
implications



Why primary
care?

Let's Start With a Patient

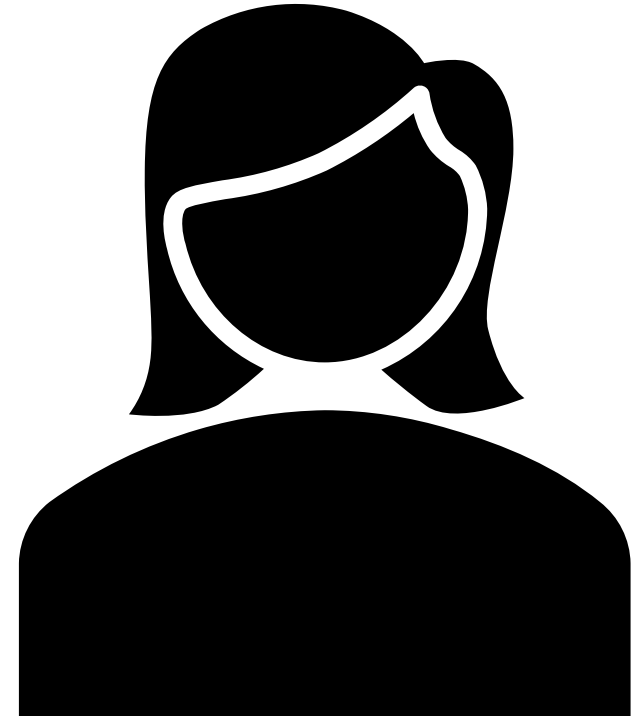
Meet Jessica

- ▶ A 38-year-old woman, established patient at your clinic
- ▶ On buprenorphine for 8 months – doing reasonably well
- ▶ PHQ-9 of 16 at every visit for the past 4 months
- ▶ PCL-5 of 44 – history of childhood abuse and domestic violence
- ▶ Chronic low back pain, rates it 6-7 out of 10
- ▶ Unstable housing, worried about losing her apartment

You've tried two antidepressants – neither made much difference

Questions for you:

- ▶ Who owns her mental health care?
- ▶ Is this someone you refer, or someone you keep?



The OUD Epidemic – By the Numbers

- ▶ 6-9 million Americans have opioid use disorder
- ▶ ~80,000 opioid-related overdose deaths per year
- ▶ Only 1 in 4 individuals with OUD receives medication for OUD
- ▶ There are ~ 8,000 physicians in the US with board certification in addiction psychiatry or addiction medicine

OUD and mental illness often co-occur

- ▶ Depression affects **30-52%** of adults with OUD
- ▶ PTSD affects **18-50%** of adults with OUD
- ▶ Many patients have **BOTH** – in the CLARO trial, **59%** had OUD + depression + PTSD simultaneously

- ▶ Nationally, only 1 in 5 get treatment for both disorders

These aren't just co-occurring – they actively interact and amplify each other

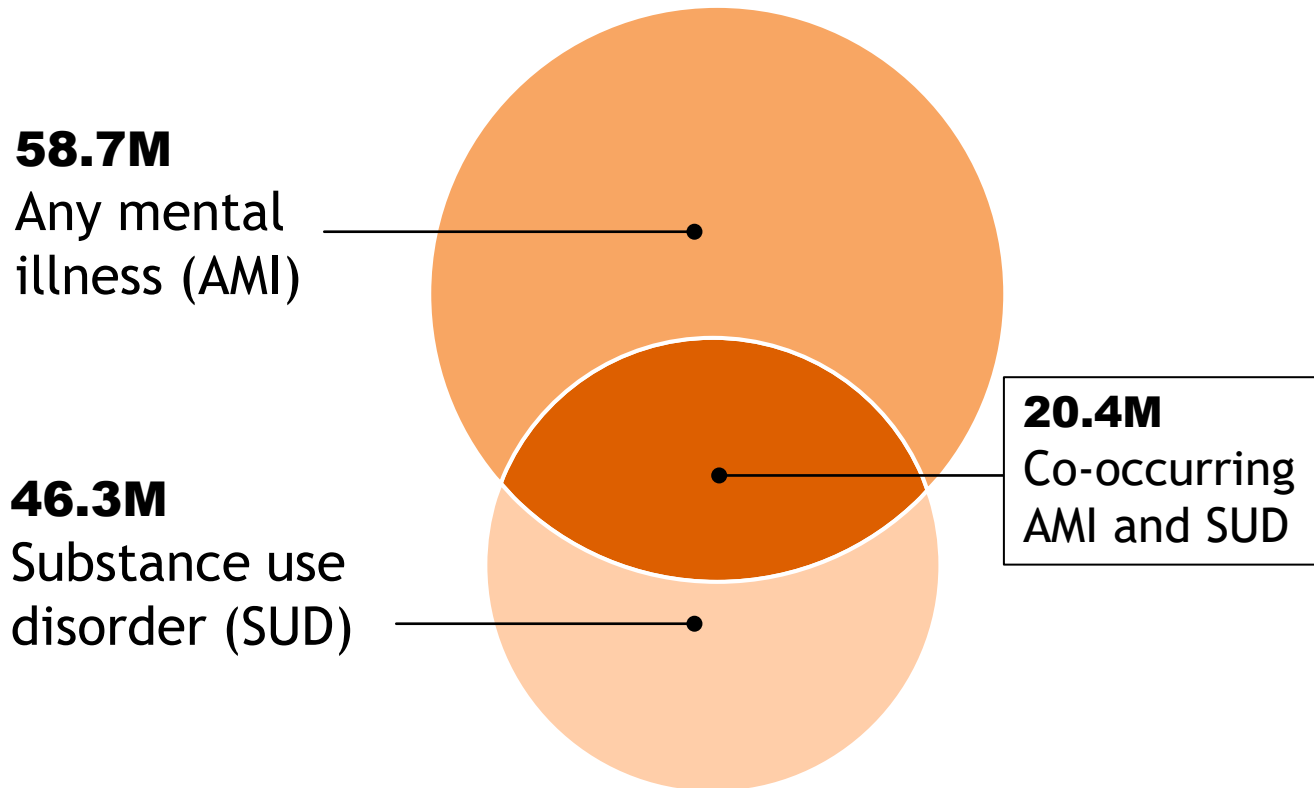
Co-Occurring Disorders Makes Treatment Harder

Co-occurring mental illness means:

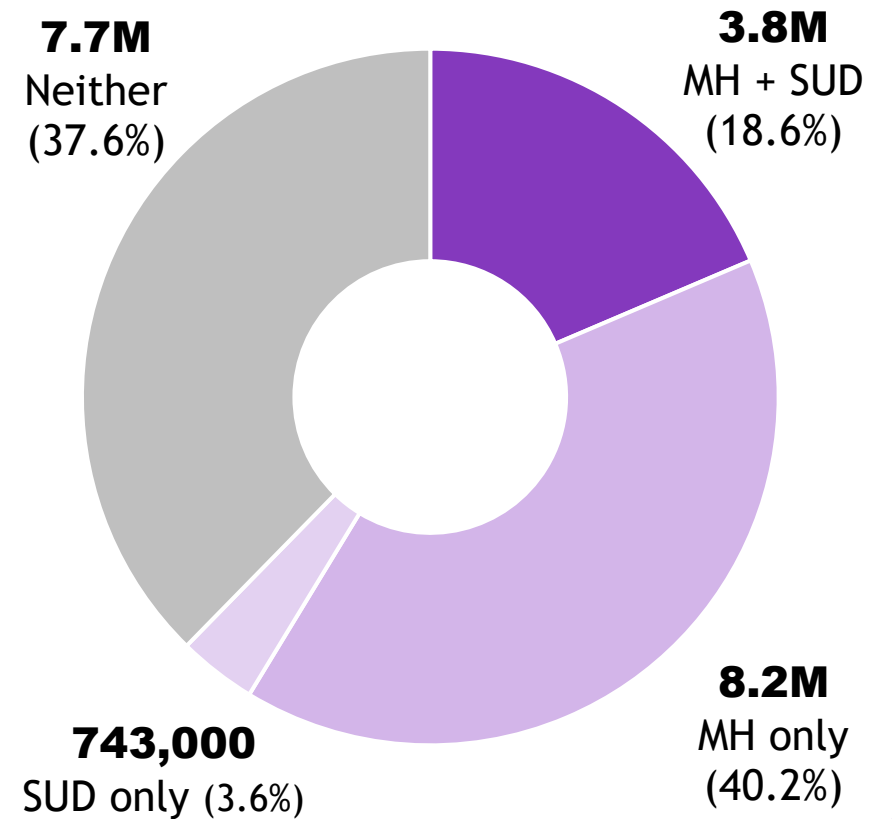
- ↓ Treatment retention in OUD programs
 - ↑ Relapse risk
 - ↑ Overdose risk
 - ↑ Suicide risk — depression AND PTSD are independent risk factors
- ▶ Greater social complexity — trauma, housing, legal involvement

Accessing Care is Difficult

Prevalence, 2023



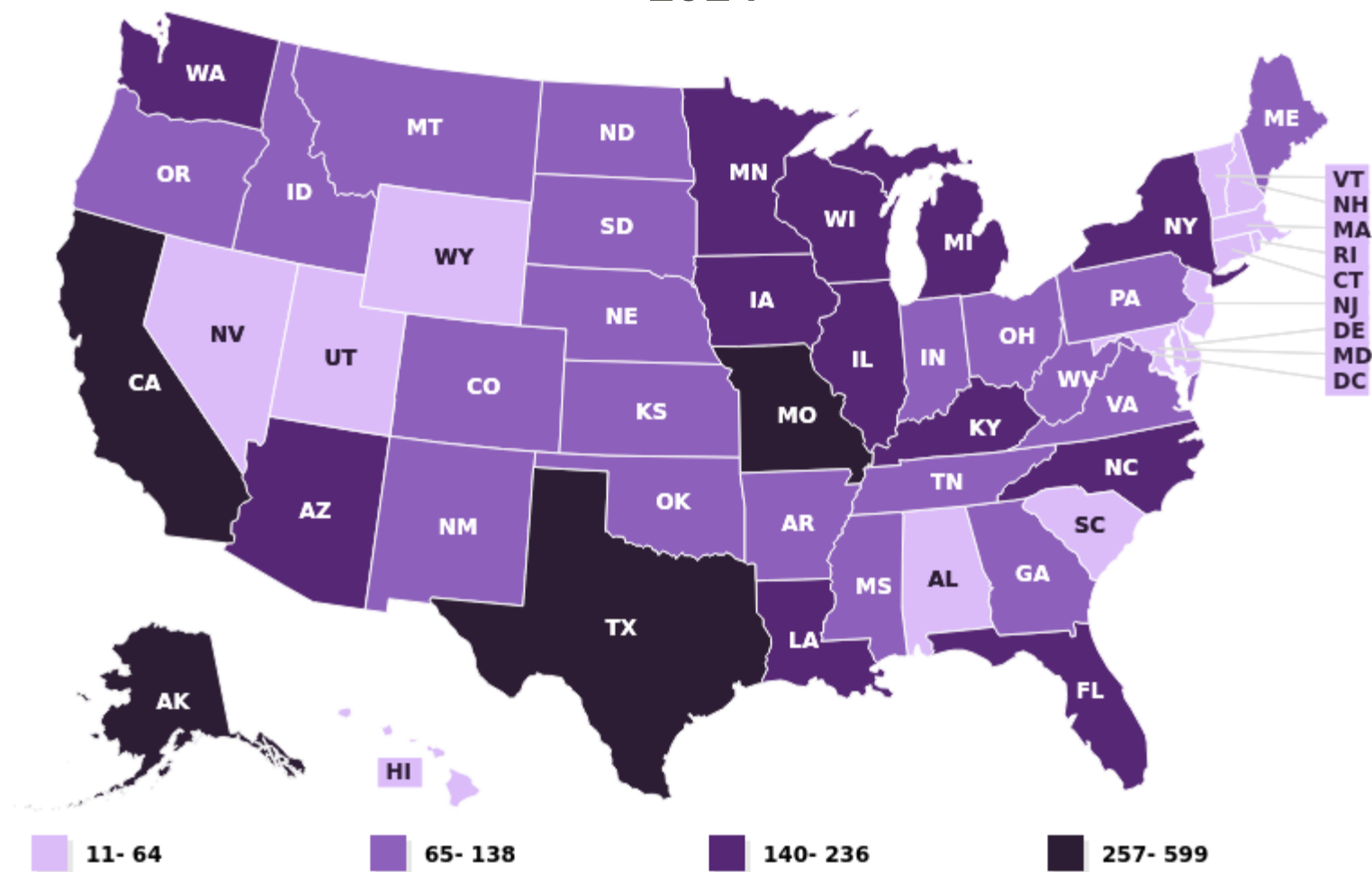
Type of Treatment Accessed, 2023



Mental health provider shortages are real

More than one-third of the U.S. population (122M) live in a Mental Health Health Care Professional Shortage Area (HPSA).

Number of Mental Health Care HPSAs by State, December 2024

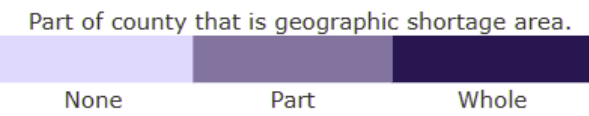
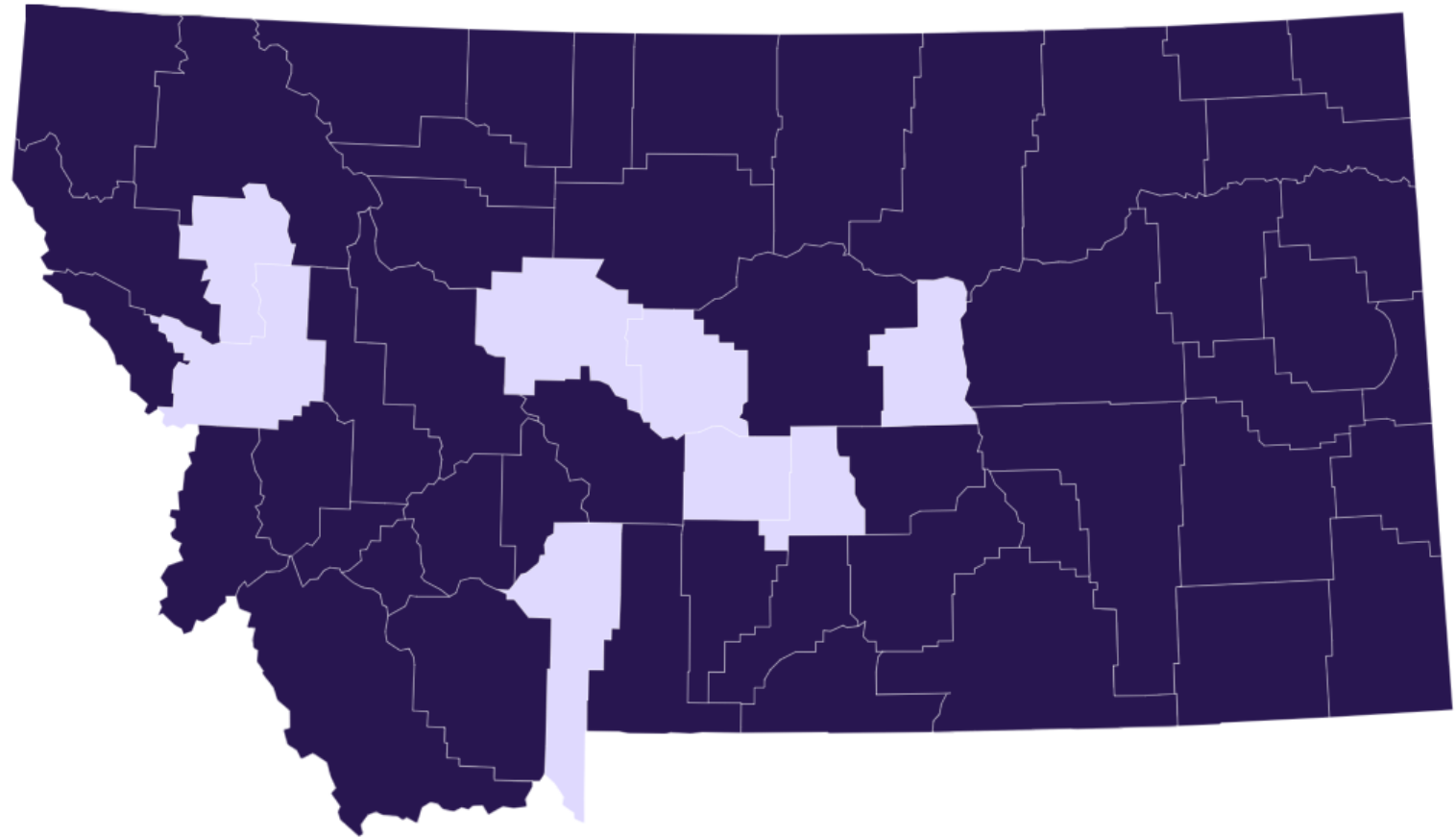


Source: <https://www.kff.org/other/state-indicator/mental-health-care-health-professional-shortage-areas-hpsas>

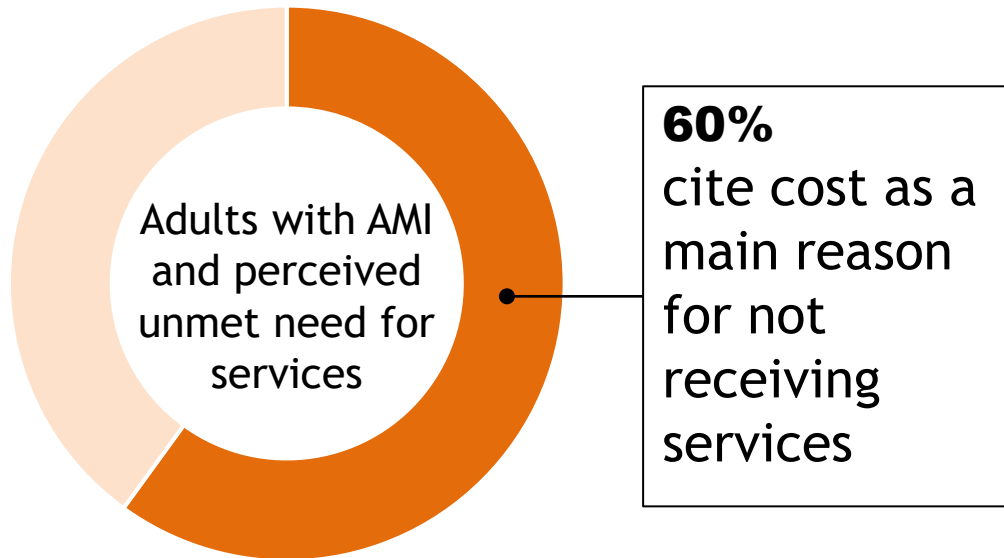
Montana's Particular Challenge

Mental Health Professional Shortage Areas by County, January 2026 - Montana

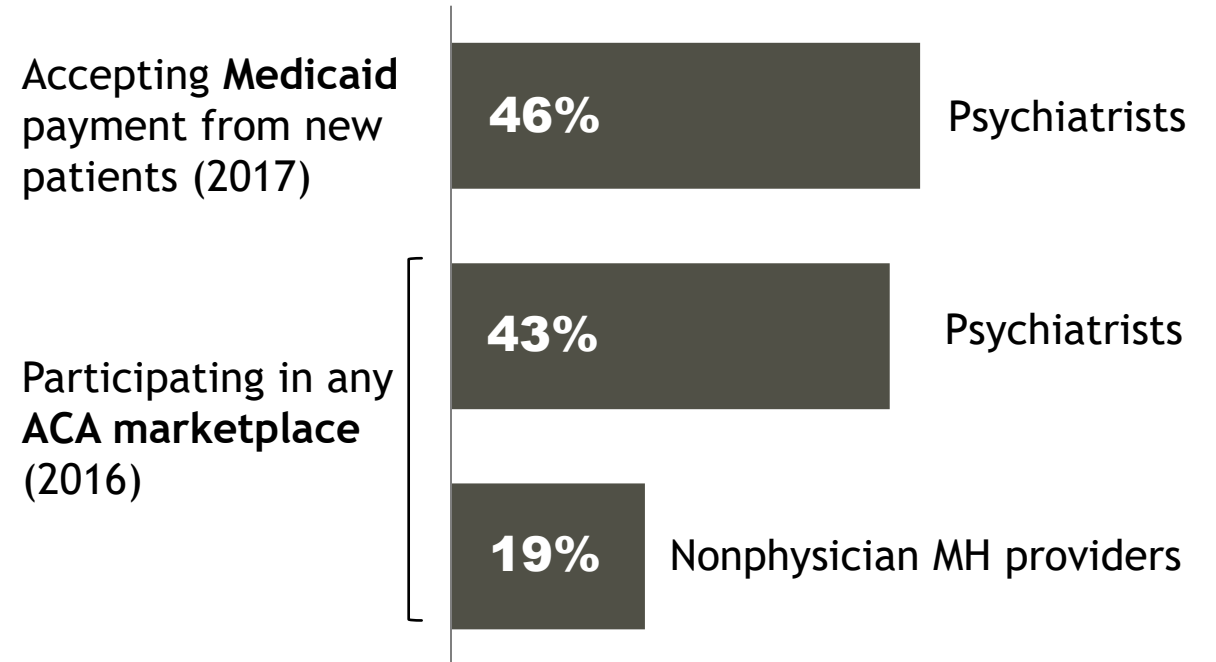
In Montana, primary care IS the mental health and addiction care system for most people. Referring out is not a realistic option for the majority of your patients.



Financial challenges act as barriers, too



MH Providers and Insurance Payments



Stigma can stand in the way of people getting treatment

About $\frac{3}{4}$ felt they should have been able to handle mental health or SUD problems on their own

Other common worries about treatment:

- ▶ What other people would think or say (44%)
- ▶ Privacy (35%)
- ▶ Bad things happening (e.g., lose job, home, children) (34%)

Patients associate more stigma with going to specialists than primary care



Primary Care IS the System

Primary care is already where these patients are:

- ▶ Most pharmacotherapy for OUD and depression already happens in primary care
- ▶ Patients with OUD prefer primary care – less stigma, existing relationship, one-stop
- ▶ In Montana: most patients have NO realistic access to specialty addiction medicine or psychiatry

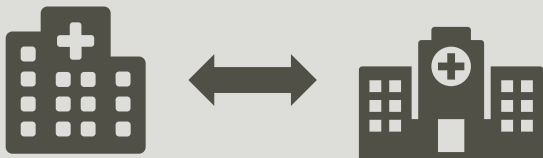
The question is not **WHETHER** primary care should treat OUD with co-occurring mental illness The question is **HOW** to do it well

Primary care providers need help, if they are to become a locus of MH and SUD care

Three Models:

Coordinated care

Two health systems or locations that share information



Co-located care

Mental health or SUD provider in same physical location, but not integrated into the primary care team

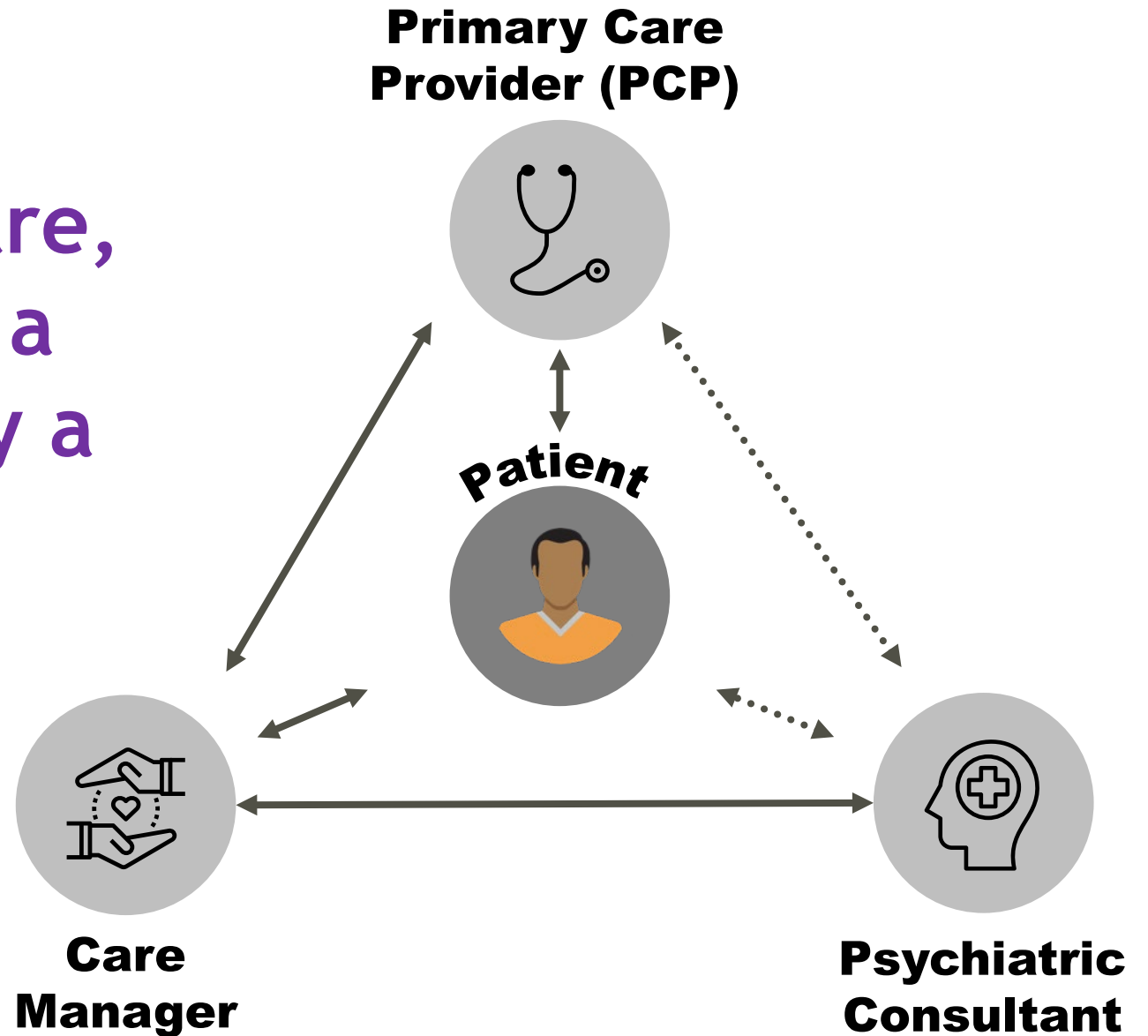


Collaborative care

One integrated team providing both mental health and SUD care



In collaborative care, providers work as a team supported by a registry





The CLARO study—
Collaborative Care for
Co-Occurring Disorders

The CLARO Trial

*Published: Watkins et al., JAMA Internal
Medicine, 2026*



The CLARO Trial:

Collaborative Care for Co- Occurring Disorders

- ▶ Pragmatic randomized clinical trial
- ▶ 18 primary care clinics in New Mexico and California – all serving low-income populations; 16/18 in Mental Health Professional Shortage Areas
- ▶ Eligible: adults with OUD plus probable major depression and/or PTSD
- ▶ N = 797 randomized
- ▶ 6-month intervention with 6-month primary endpoint

There are some key differences between typical CC and the CLARO model

Typical CC

One disorder

Nurses or LCSWs act as care managers

Nurses/LCSWs deliver psychotherapy

BHC is a psychiatrist



Patient

Care manager (CM)



Behavioral health provider (BHP)

Behavioral health consultant (BHC)



CLARO

2 or more disorders

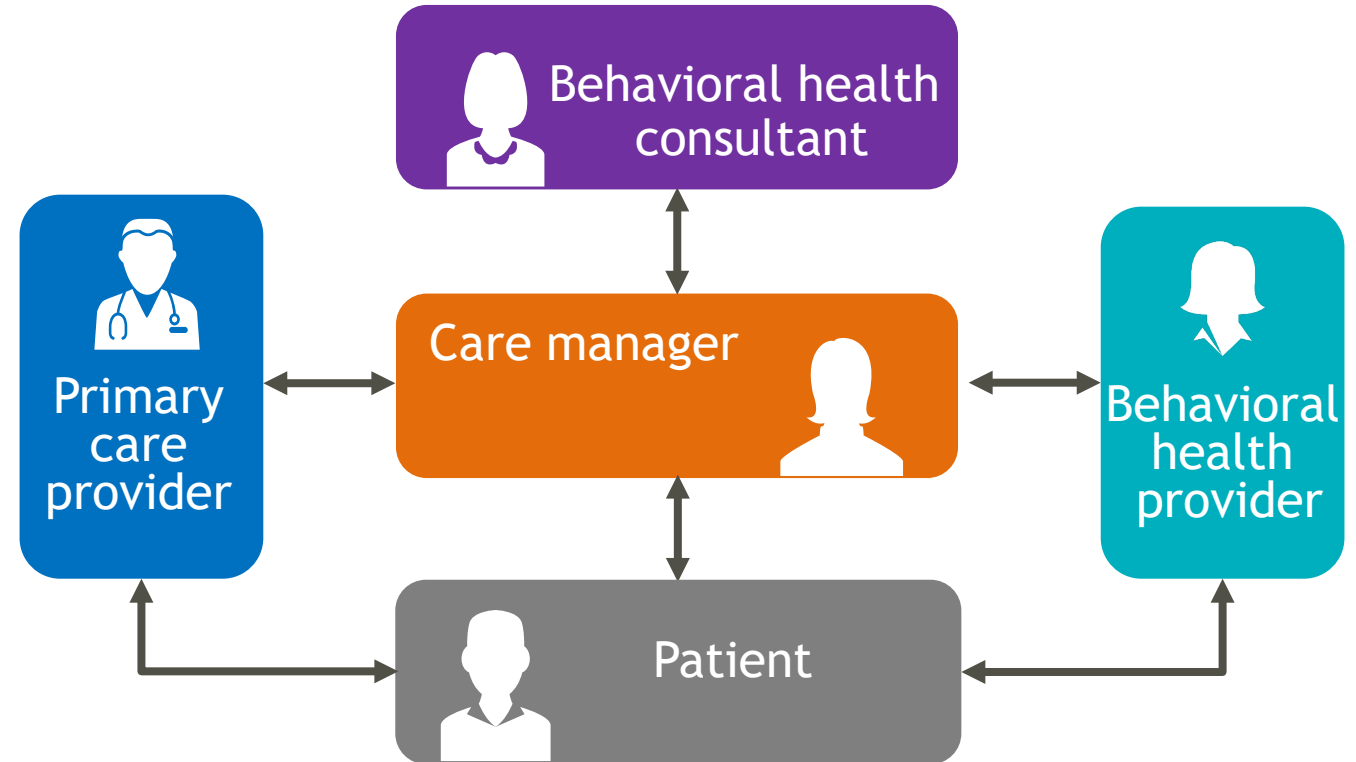
Community health workers (CHW)

BHP delivers psychotherapy

BHC needs diverse expertise

The CLARO Collaborative Care Model

- Care manager is a Community Health Worker who also addresses social needs
- Psychotherapy provided by referral

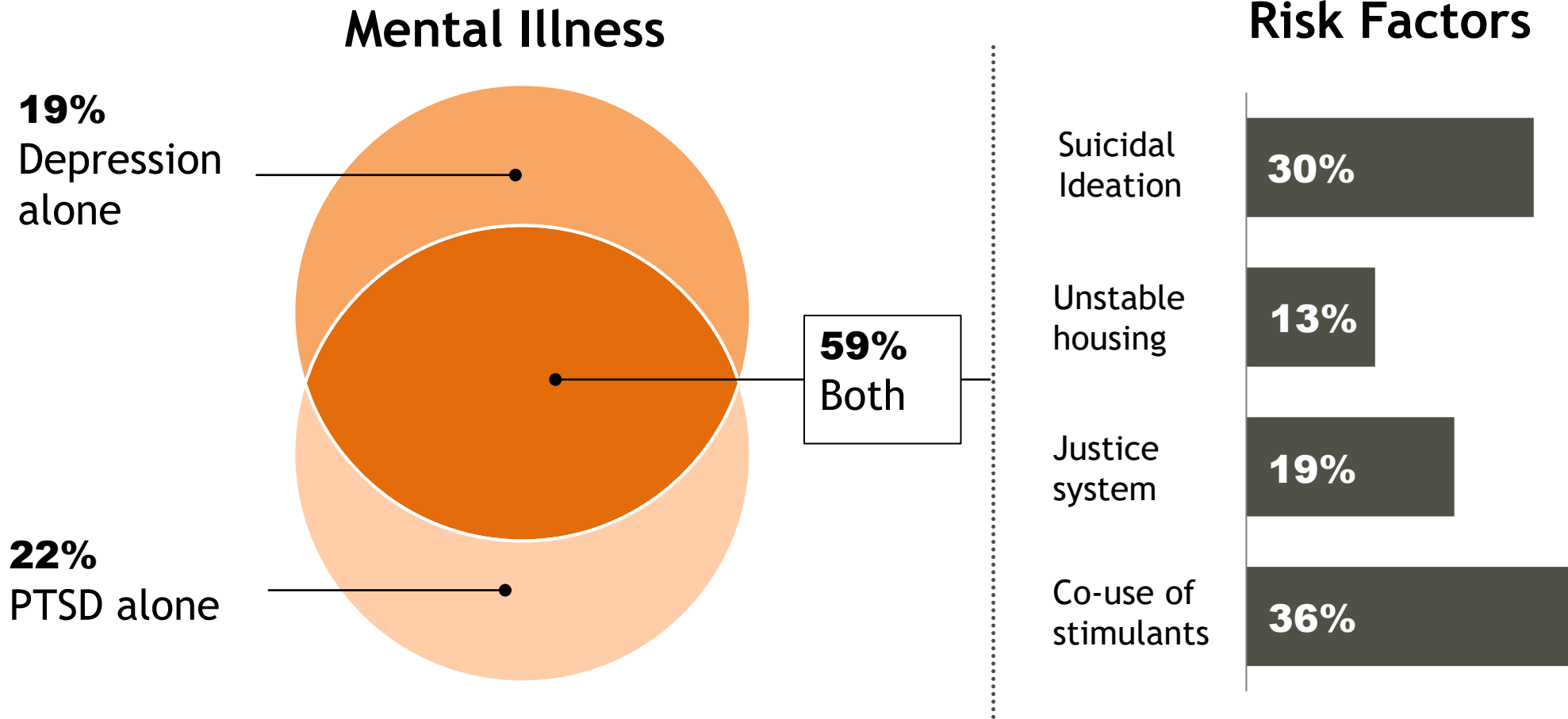


Who Were the Participants?

- ▶ Mean age **40** | **54% female** | **68% Hispanic**
- ▶ **80%** already on medication for OUD at enrollment
- ▶ PHQ-9 mean **13.8** – moderate to severe depression
- ▶ PCL-5 mean **38.1** – clinically significant PTSD



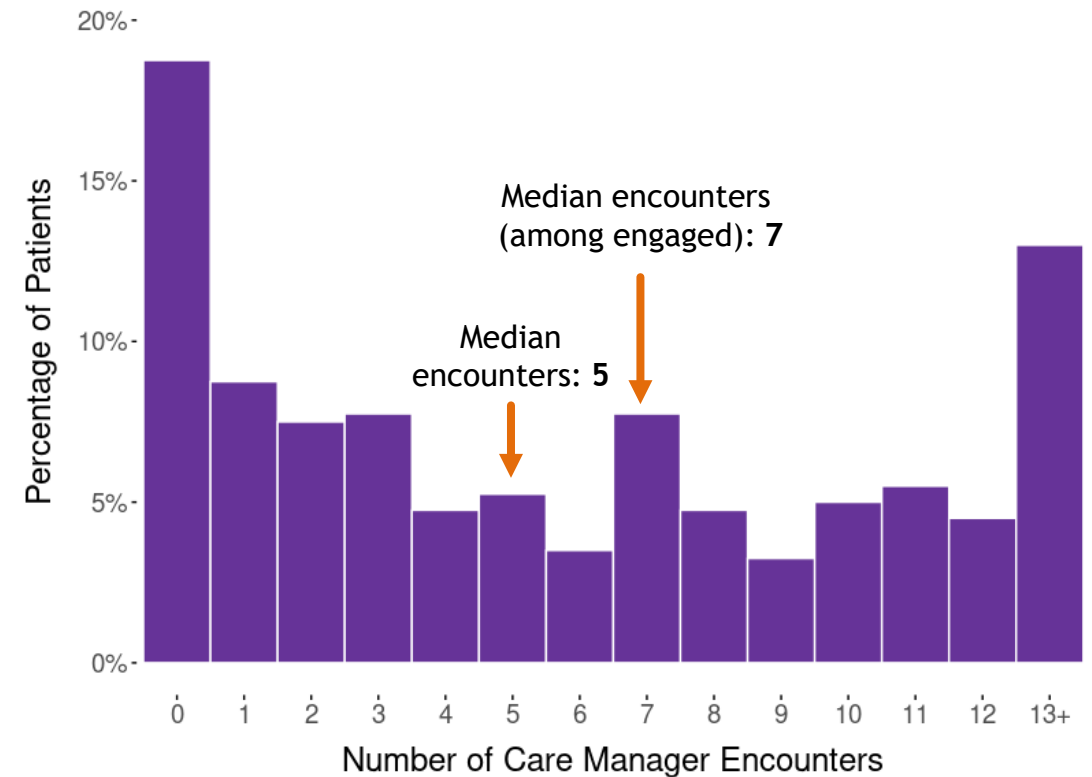
Participants were Clinically Complex



Care managers were able to reach patients

- ▶ **81%** of patients assigned to collaborative care received at least one encounter
- ▶ **57%** (226/400) engaged (2 visits+ MBC +psychiatric case review)
- ▶ Mean intake visit: 31 minutes
- ▶ Average of 4 (range 0-38) contact attempts before intake visit

Care Manager Encounters (per patient)

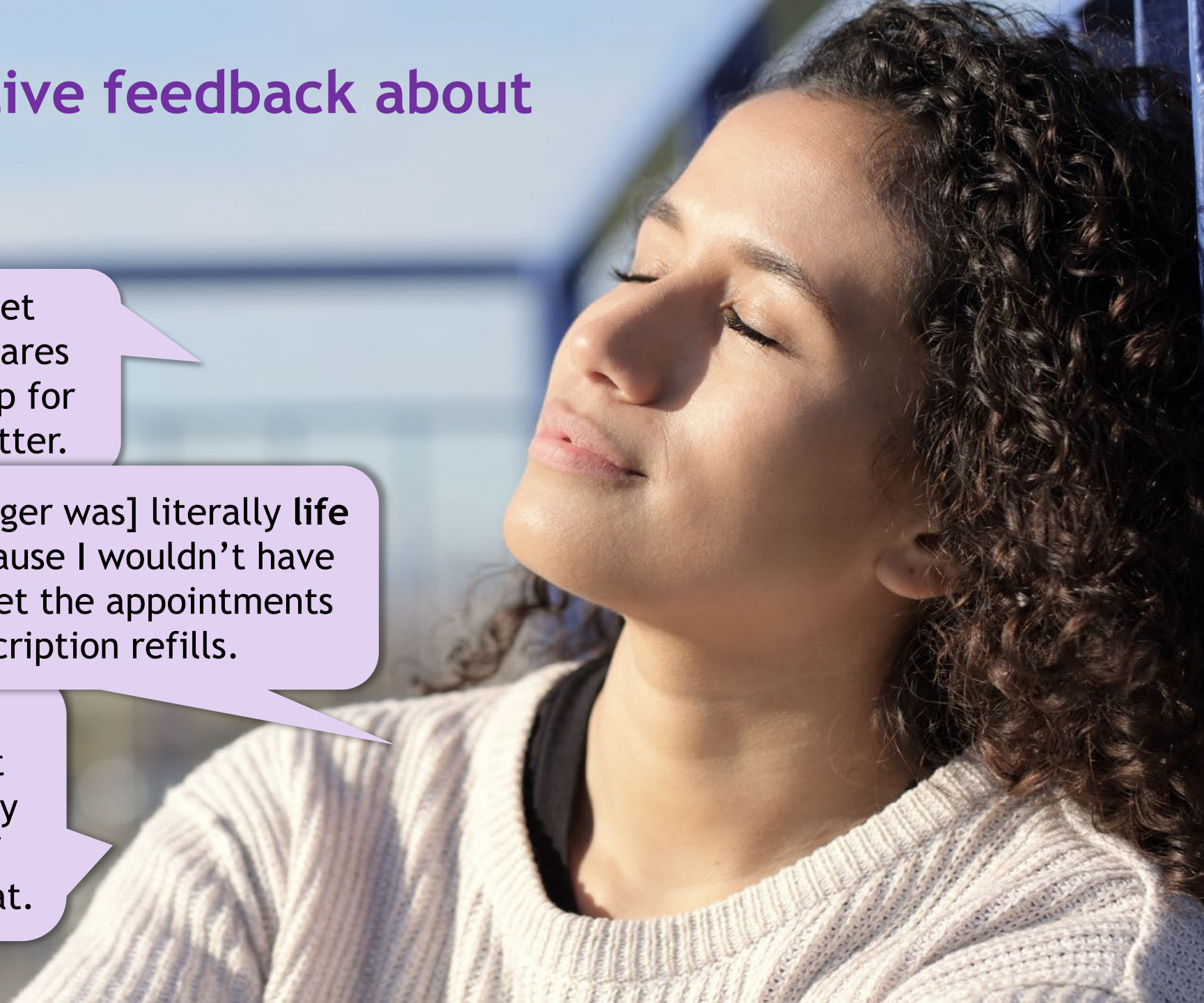


Patients gave positive feedback about collaborative care

Every time I stop using I get horrible anxiety and nightmares from the PTSD... Getting help for both at the same time is better.

[The care manager was] literally **life changing**, because I wouldn't have been able to get the appointments and prescription refills.

If I needed something, she would email me about it. It was super helpful. I probably wouldn't have done half of what I did if I didn't have that.





Providers also shared positive experiences

My comfort level [treating COD] has increased pretty dramatically.

COD is much more complex than just treating them with medication...it complicates basically everything.

It is kind of nerve racking...do I prioritize one [disorder] or the other? So having the psychiatrist...was very helpful.

Statistical Methods



Intent to treat analyses



Examined primary, secondary and exploratory outcomes



Models adjusted for potential bias from attrition and confounding



Conducted per protocol analyses



Main Trial Results – No Significant Differences

Outcome	Baseline		6-Month Follow-up		
	Enhanced Usual Care	Collaborative care	Enhanced Usual Care	Collaborative Care	P-value
	Mean (95% CI)	Mean (95% CI)	Adjusted Mean (95% CI)	Adjusted Mean (95% CI)	
Days until first buprenorphine prescription	NA	NA	20.2 (14.3 to 26.0)	27.1 (18.5 to 35.8)	0.19
Days of prescribed buprenorphine	NA	NA	89.0 (80.6 to 97.3)	93.3 (85.1 to 101.4)	0.47
PHQ-9	15.8 (15.3 to 16.4)	15.7 (15.2 to 16.2)	12.0 (11.1 to 12.9)	11.0 (10.1 to 11.9)	0.13
PCL-5	39.3 (37.5 to 41.1)	40.4 (38.6 to 42.2)	32.6 (30.1 to 35.1)	31.7 (29.0 to 34.4)	0.63

► No differences on any primary, secondary or exploratory outcomes

Published: Watkins et al., JAMA Internal Medicine, 2026

Per Protocol Analyses: Average Treatment Effect in the As Treated Population

-  = substance use outcomes with notable trends
-  = mental health outcomes with notable trends

	Any CC*		All CC†	
	Coeff	p-value	Coeff	p-value
Primary Outcomes				
Buprenorphine access	-10.77	0.24	-15.62	0.24
MOUD continuity of care	5.89	0.37	8.24	0.37
MDD symptom severity	-1.25	0.09	-1.58	0.09
PTSD symptom severity	-0.52	0.81	-0.69	0.81
Secondary Outcomes				
MDD remission	0.07	0.09	0.09	0.09
MDD response	0.04	0.39	0.05	0.39
PTSD remission	-0.02	0.79	-0.02	0.79
PTSD response	0.03	0.51	0.04	0.51
Suicidality	-0.04	0.32	-0.05	0.32
Opioid use frequency	-0.19	0.84	-0.25	0.84
Opioid overdose events	0.00	0.88	0.00	0.88
Physical health functioning	-1.67	0.13	-2.14	0.13
Mental health functioning	1.85	0.15	2.38	0.15
Exploratory Outcomes				
Stimulant use frequency	-1.01	0.24	-1.31	0.24
Opioid overdose risk behaviors	-1.09	0.04	-1.41	0.04
Opioid use disorder severity	-1.76	0.02	-2.26	0.02
Alcohol use severity	-0.37	0.18	-0.47	0.18

*Received any CC intervention elements compared to everyone who did not

†Received key components of CC intervention compared to everyone who did not

Does Collaborative Care work better for some groups of patients?

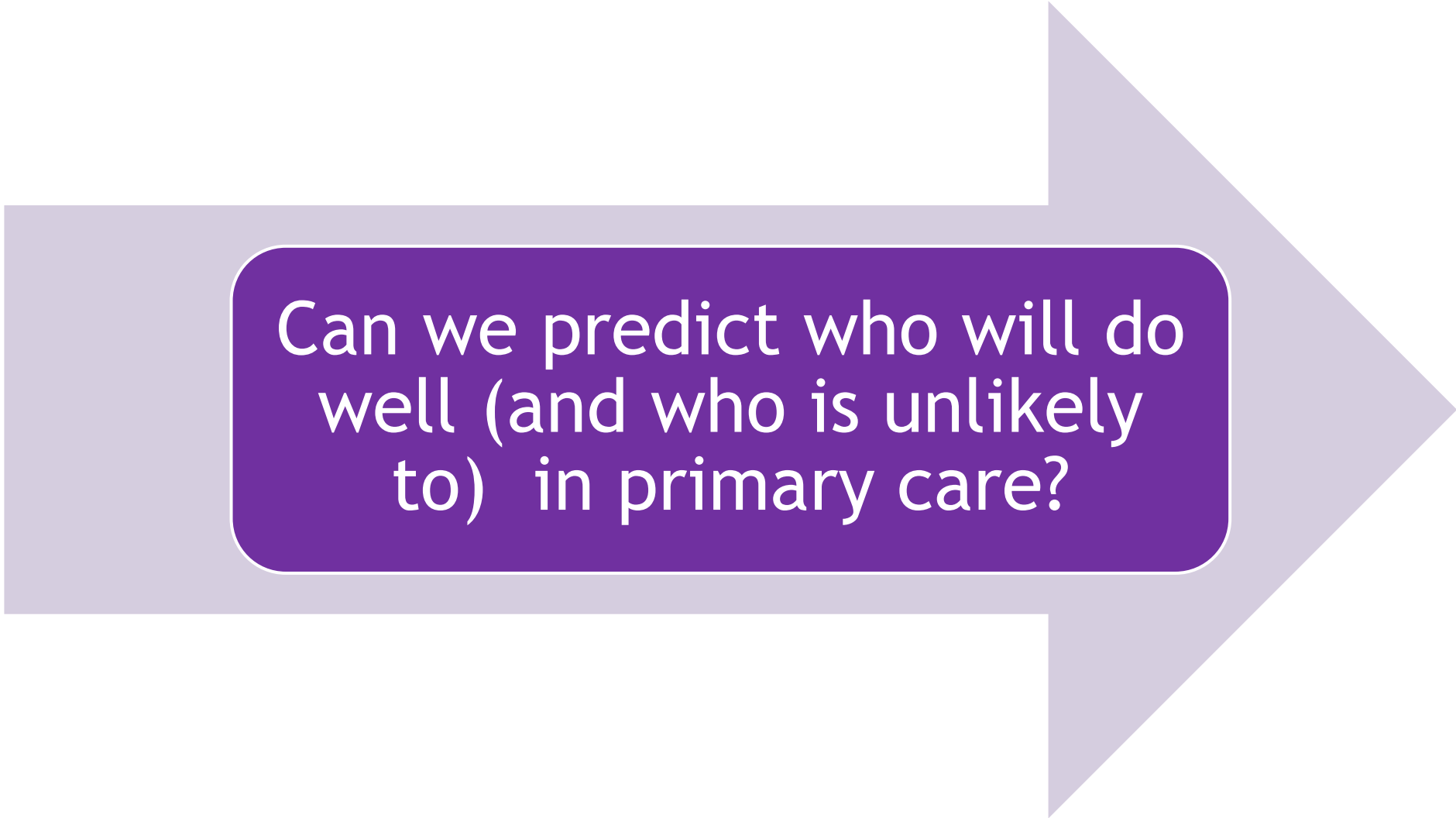
Methods:

- ▶ Causal forest machine learning — analyzed by treatment arm
- ▶ Estimates: expected benefit of CoCM vs. Enhanced Usual Care for each individual patient

Preliminary — Griffin et al. 2026, under review

**Collaborative
care may be
best suited to
less clinically
complex
patients**

- ▶ **Exploratory patterns suggested:**
 - ▶ Patients with LOWER clinical complexity showed more relative benefit from CoCM
 - ▶ Patients with highest symptom burden improved similarly under both CoCM and EUC
 - ▶ Complexity...Having all three disorders, co-using stimulants, severe addiction to opioids, housing instability, poverty



Can we predict who will do well (and who is unlikely to) in primary care?

Who Gets Better – Methods

Post-hoc secondary analysis, both arms combined.

- ▶ **Four binary outcomes at 6 months:**
 - ▶ No illicit opioid use in past 30 days
 - ▶ Buprenorphine continuity – no 30-day gap in prescriptions
 - ▶ Depression response – $\geq 50\%$ reduction in PHQ-9
 - ▶ PTSD response – $\geq 50\%$ reduction in PCL-5
- ▶ **Method:** Recursive partitioning – decision tree machine learning
- ▶ **Predictors:** Social needs, mental health severity, substance use severity, co-morbidities

Preliminary – Watkins et al., under review

Who gets better?

OUD Results

At 6 months:

- ▶ **76%** reported no illicit opioid use in past 30 days
- ▶ **60%** maintained on buprenorphine with no treatment gaps

These rates are comparable to OUD outcomes in patients without co-occurring mental illness (**58%**).

Co-occurring depression and PTSD do NOT prevent effective OUD treatment in primary care

Who gets better?

Mental Health Results

At 6 months:

- ▶ **27%** achieved depression response — $\geq 50\%$ PHQ-9 reduction
- ▶ **24%** achieved PTSD response — $\geq 50\%$ PCL-5 reduction

Same results regardless of whether OUD was stabilized

This compares to **~46%** depression response in many collaborative care trials.

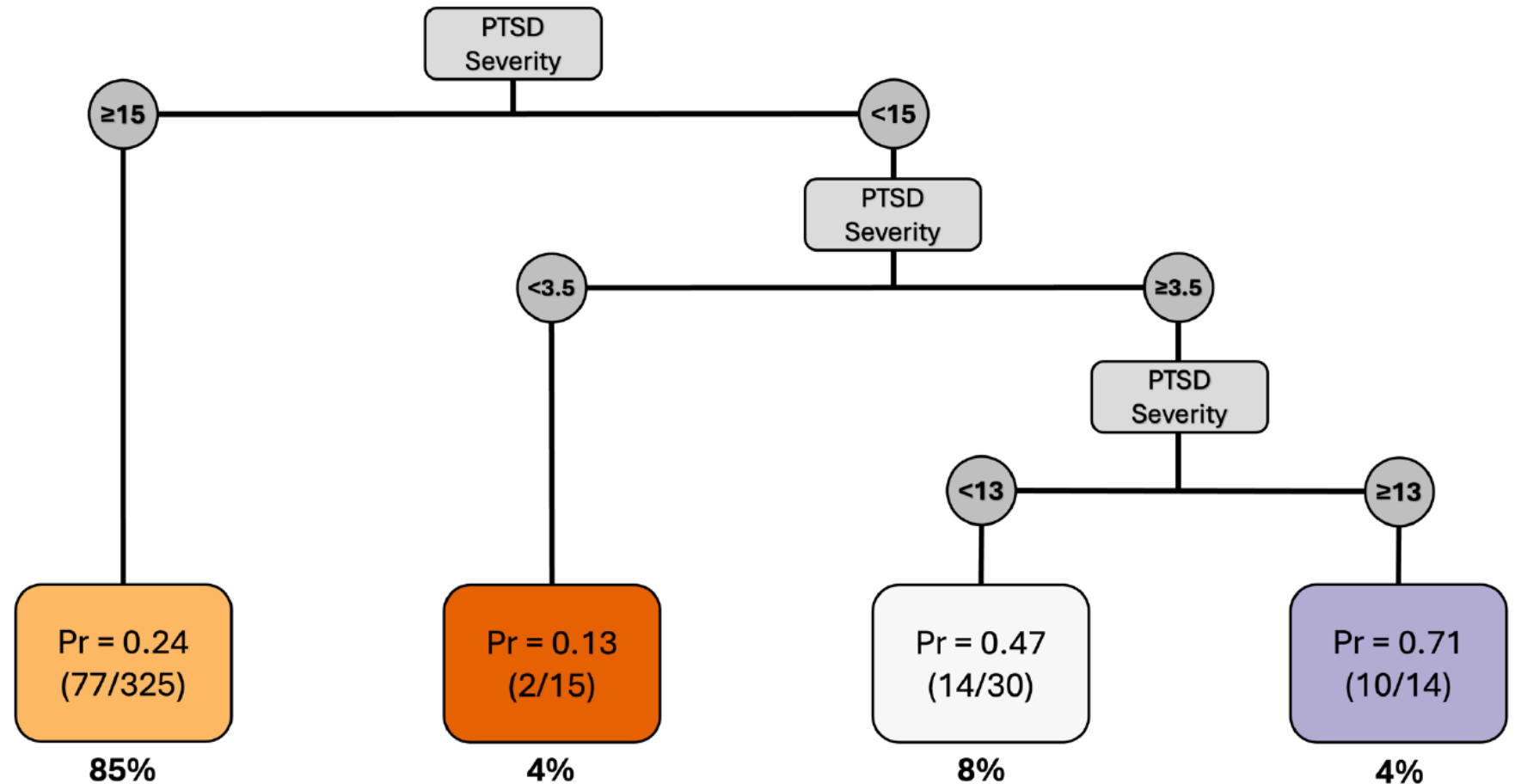
Primary care-based management as currently delivered is not enough for mental health in this population

Who Has Good Mental Health Outcomes?

c) Predicted probability of depression response (N=384)

Depression response:

- ▶ Even sub-threshold PTSD predicted only **24%** probability of depression response
- ▶ PTSD undermines depression treatment even when not fully symptomatic

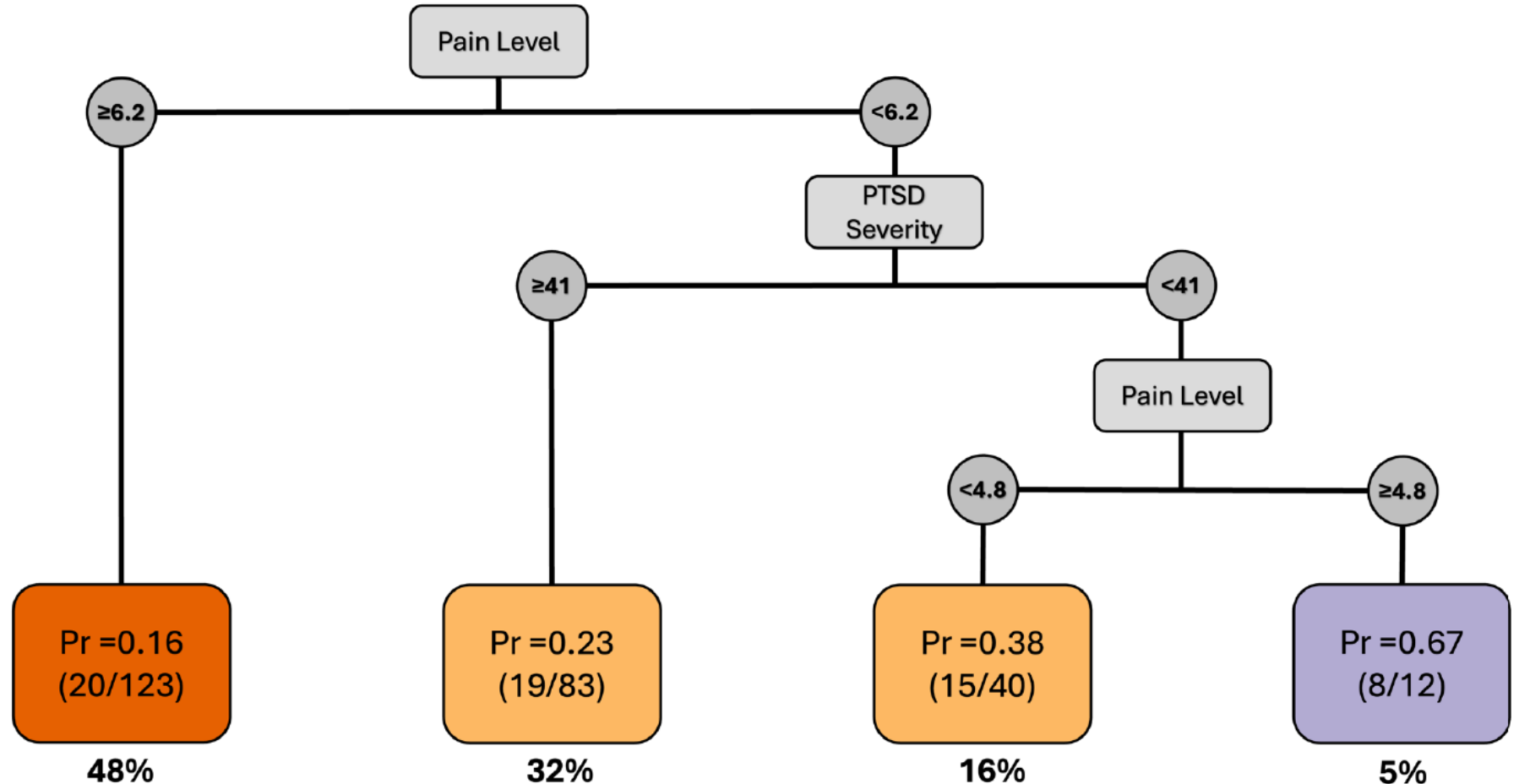


Who Has Good Mental Health Outcomes?

d) Predicted probability of PTSD response (N=258)

PTSD response:

- ▶ Pain ≥ 6.2 out of 10
→ only **16%** predicted probability
- ▶ Pain 4.8-6.2 + lower baseline PTSD severity
→ **67%** predicted probability



Putting it all together



Primary care CAN manage OUD effectively – even in complex patients



Depression and PTSD are much harder to treat – only 1 in 4 improved meaningfully



Standard collaborative care may not be enough for the most complex patients

The clinical question is:

What does "more" look like – and how do we do it in primary care?



Clinical
Implications

Principle 1 – Start Early, Treat Simultaneously

Don't wait for OUD stabilization before treating depression and PTSD

- ▶ Waiting for OUD stabilization did not improve mental health results

In practice:

- ▶ Start mental health assessment at the SAME visit as buprenorphine induction
- ▶ Use PHQ-9, PCL-5, and PEG (pain) at regular intervals – build it into your workflow
- ▶ Set the expectation with patients: "We're treating both of these today – the opioid use AND the mental illness"
- ▶ For patients with both PTSD and depression – treat BOTH, not just the depression

Principle 2 – Treat to Remission, Not Just Response

Don't accept partial improvement – use measurement to drive to remission

Targets:

- ▶ PHQ-9 <5 for depression remission
- ▶ PCL-5 <33 for PTSD remission (or $\geq 50\%$ reduction as a minimum)
- ▶ Pain: not a specific target, but improvement matters

If not improving by 4-6 weeks – change the approach

Principle 3 – Pharmacotherapy: Think Combination Earlier

For depression not responding to standard treatment:

Consider earlier augmentation:

- ▶ Second antidepressant (combination pharmacotherapy – e.g., SNRI + bupropion)
- ▶ Atypical antipsychotic augmentation – aripiprazole, quetiapine, brexpiprazole
- ▶ Optimize buprenorphine dose – emerging evidence for antidepressant and anti-craving properties at higher doses
- ▶ Consider Ketamine

Think 12+ months, not 6: This is a chronic condition – plan accordingly

Principle 4 – Address Pain Directly

Pain is not just a comorbidity – it is actively maintaining both PTSD and depression

- ▶ Pain score $\geq 6/10$ = only **16%** probability of PTSD improvement
- ▶ Treating PTSD while ignoring pain is likely insufficient

Pain is a co-treatment target:

- ▶ Use PEG scale– 3 items, 2 minutes
- ▶ Non-opioid pain strategies in this population:
 - ▶ SNRIs – (duloxetine)
 - ▶ Tricyclics at low dose
 - ▶ Physical therapy or mindfulness-based approaches for pain
- ▶ **Buprenorphine itself has analgesic properties** – optimize dose before adding other analgesics

Principle 5 – Psychotherapy in Primary Care

Psychotherapy was likely a critical missing piece in CLARO

Appropriate for routine delivery in Primary Care:

- ▶ Problem-solving therapy (PST)
- ▶ Behavioral activation
- ▶ Motivational interviewing

May need training, consultation, or referral for:

- ▶ Written exposure therapy (WET) for PTSD
- ▶ Cognitive processing therapy (CPT)
- ▶ Telehealth-delivered trauma therapy is increasingly available

Back to Our Patient Jessica



With what we now know:

- ▶ **Pain is maintaining her PTSD** → Switch to duloxetine – addresses pain and depression
- ▶ **PTSD must be treated, not just screened** → Warm handoff for WET or CPT; telehealth option
- ▶ **Two failed antidepressant trials** → Augment now; consider ketamine consult
- ▶ **Optimize buprenorphine dose** → Higher dose may add antidepressant and analgesic benefit
- ▶ **Housing** → Care manager assists – but don't let it crowd out mental health treatment

Key Messages – What to Remember

Primary care CAN effectively manage OUD even with co-occurring mental illness – the evidence supports keeping these patients in your clinic

Depression and PTSD are the hard part – only 1 in 4 patients achieved meaningful improvement with standard care

Pain + PTSD is your hardest combination – treat pain as a treatment target, not just a comorbidity

Think treatment-resistant depression – start early, treat simultaneously, push to remission, augment earlier, use longer timeframes

Both social needs AND mental health must be systematically addressed – one cannot crowd out the other. Think teamwork

Thank you

The CLARO Study Group – investigators, care managers, clinical champions, and health system partners

Funding: National Institute of Mental Health – U01MH121954

Health System Partners:

- ▶ First Choice Community Healthcare
- ▶ University of New Mexico Health System
- ▶ Hidalgo Medical System
- ▶ Los Angeles Department of Public Health

And most importantly – our 797 study participants

kwatkins@rand.org

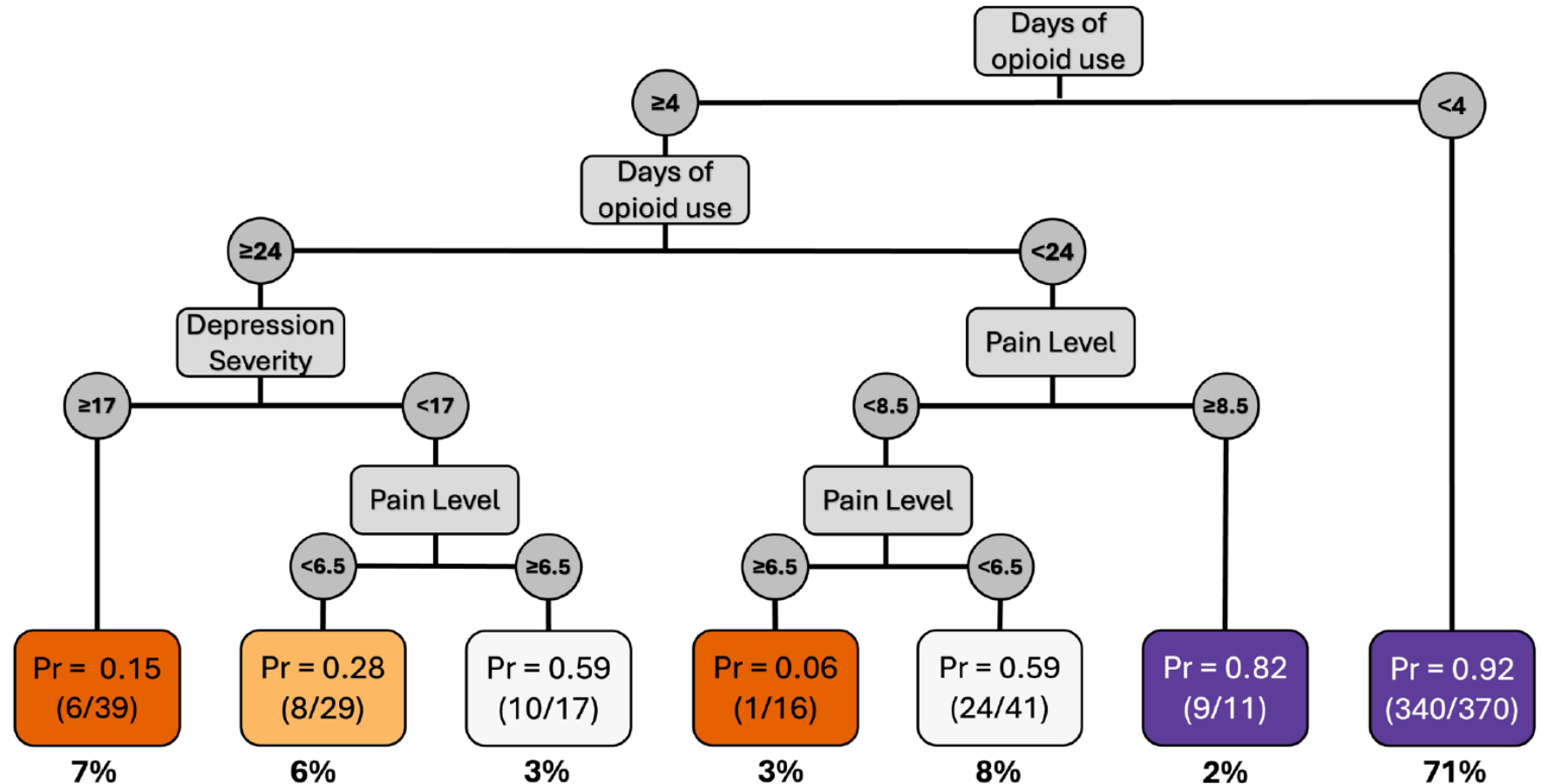


Who Has Good (or Poor) OUD Outcomes?

a) Predicted probability of opioid abstinence (N = 523)

No illicit opioid use:

- ▶ <4 days opioid use at baseline → 92% predicted probability of abstinence
- ▶ ≥24 days use + PHQ-9 ≥17 → only 15% predicted probability



Who Has Good (or Poor) OUD Outcomes?

b) Predicted probability of remaining on buprenorphine (N = 470)

Buprenorphine continuity:

- ▶ <9 days opioid use + any pain → 60-69% predicted probability
- ▶ ≥9 days opioid use → only 26% predicted probability

