

Over-amped: Managing Methamphetamine Use Disorder and Methamphetamine Psychosis

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Disclosure Information



Scott Simpson MD MPH

- Taylor & Francis—Royalties for a clinical textbook



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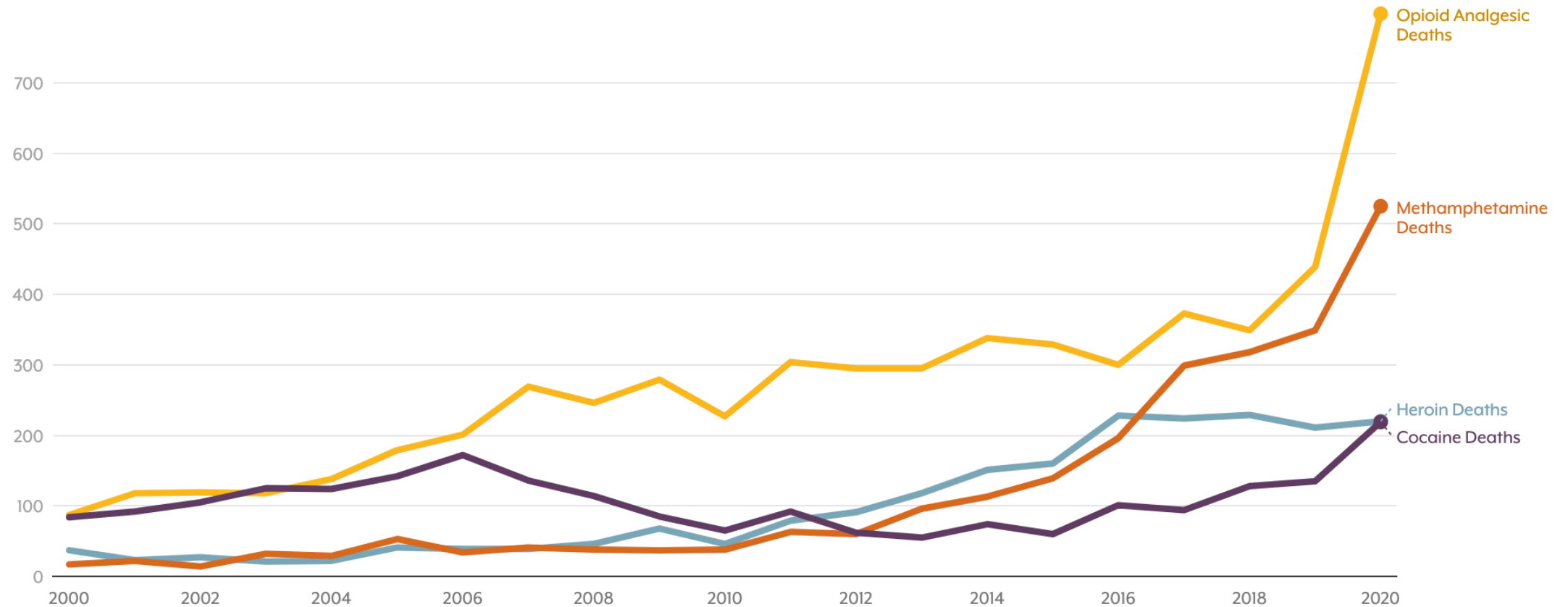
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Session Learning Objectives

At the end of the session, you will be able to:

- Describe the relationship between methamphetamine use and psychosis.
- Describe elements of addressing methamphetamine-induced psychosis in emergency settings.
- Improve engagement with patients who have methamphetamine use disorder and secondary psychosis.

Colorado Overdose Deaths

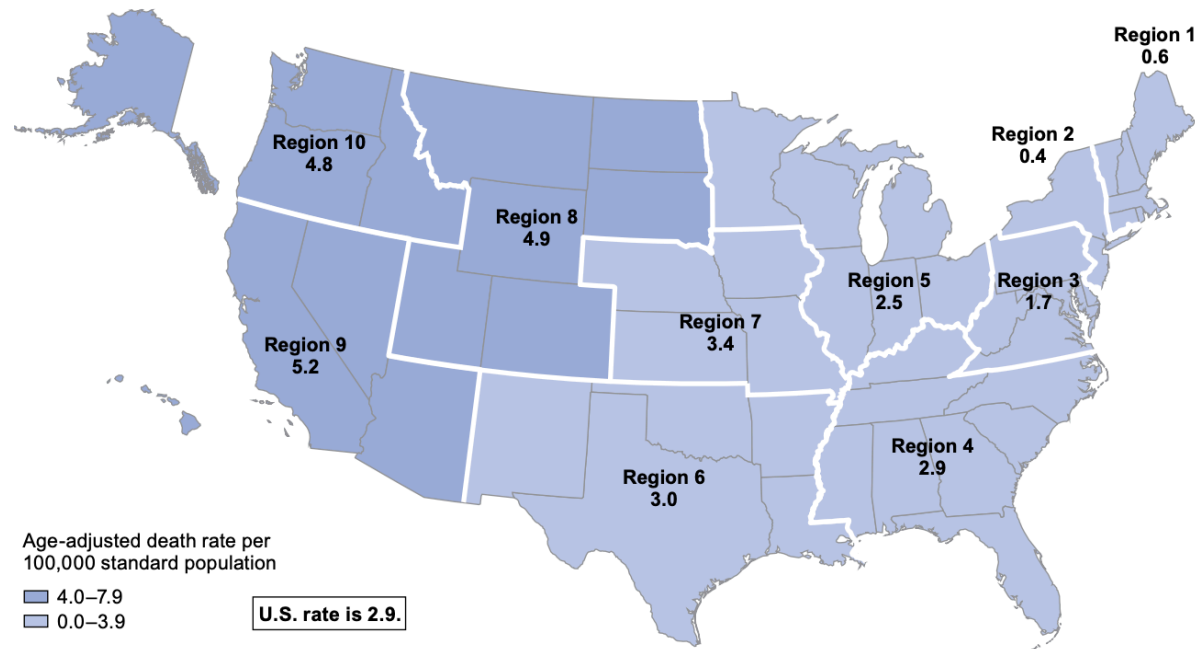


**Opioid Analgesic deaths include fentanyl-related deaths*

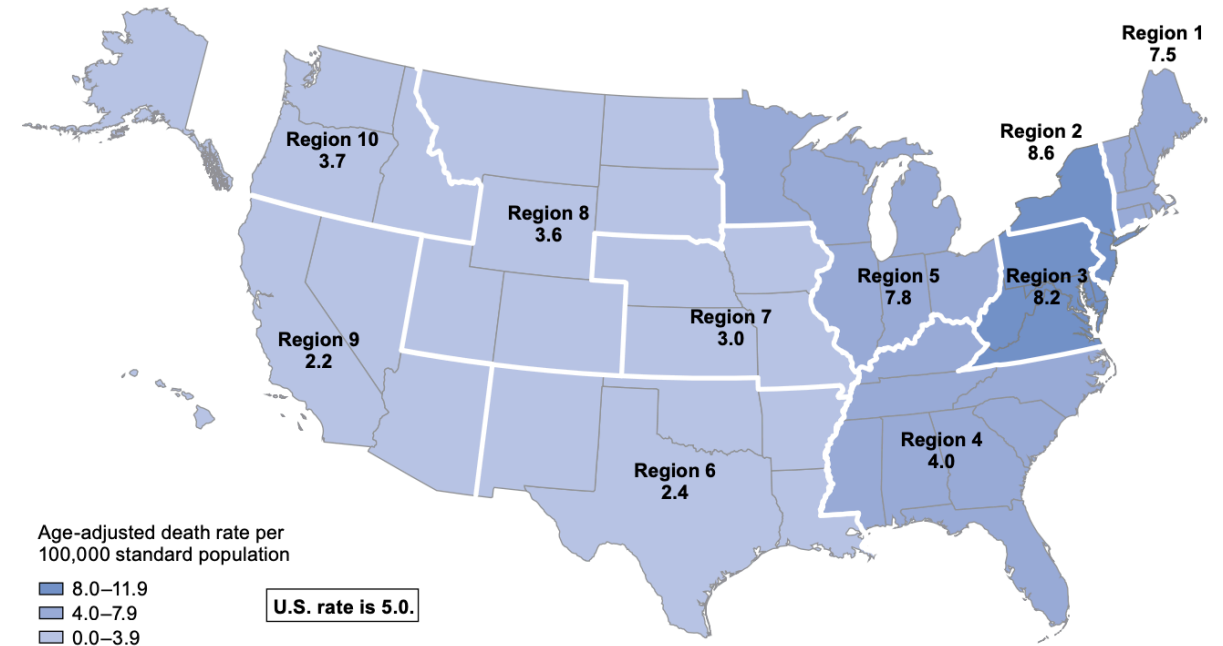
Chart: Colorado Health Institute • Source: [Colorado Department of Public Health and Environment](#)

A Western Epidemic (2017)

Meth-involved Overdose Deaths

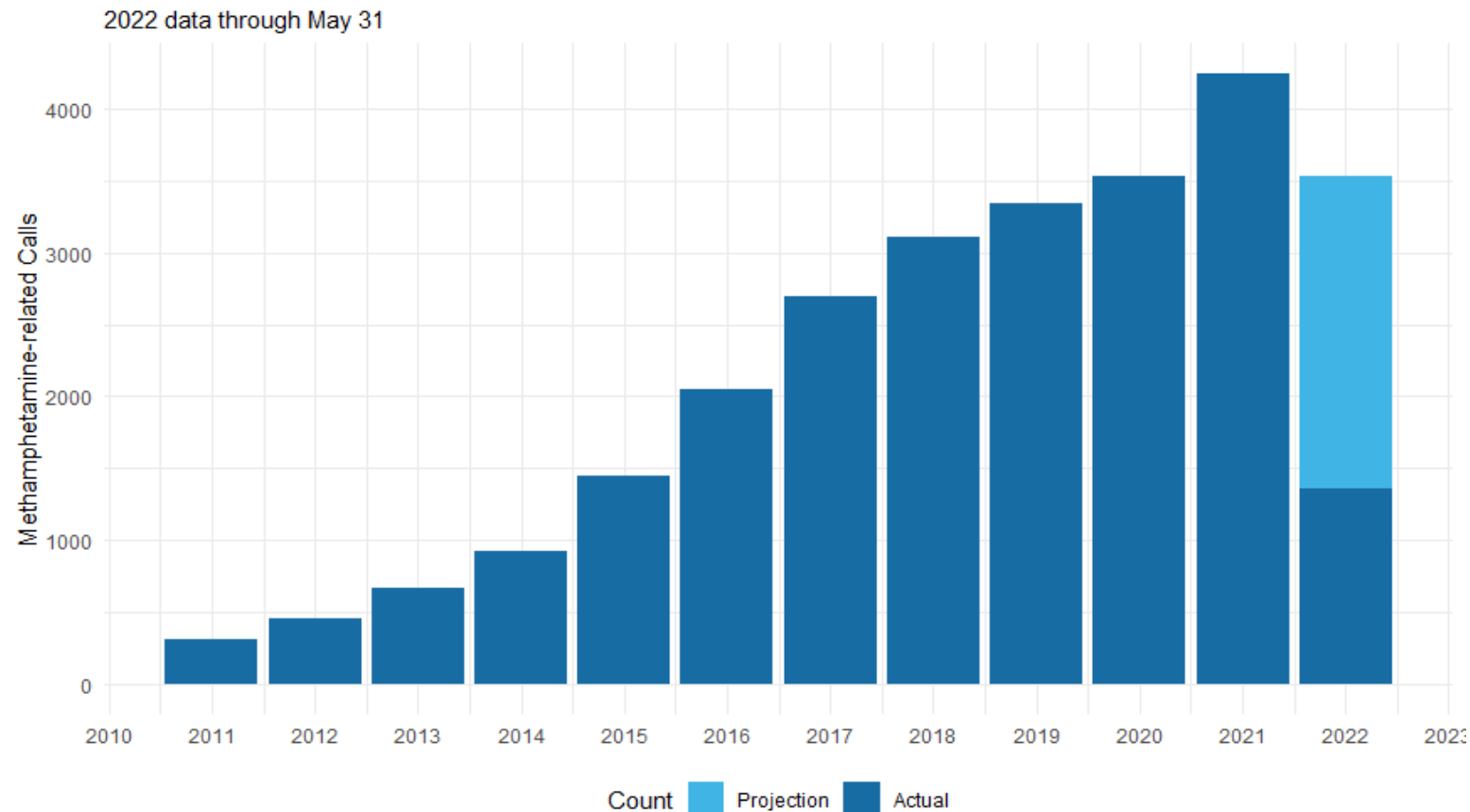


Heroin-involved Overdose Deaths

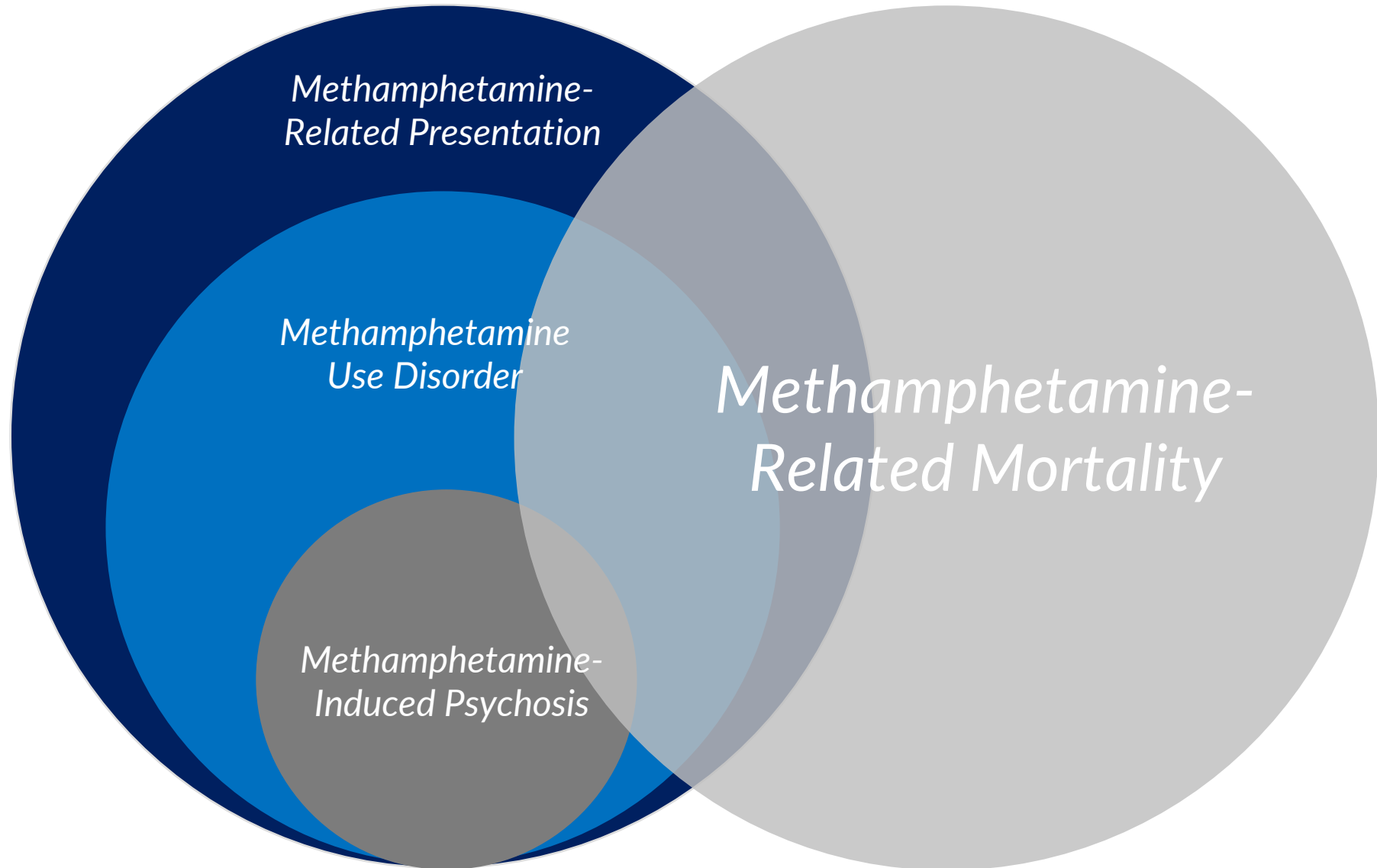


Methamphetamine in Denver, CO

EMS Call Volume

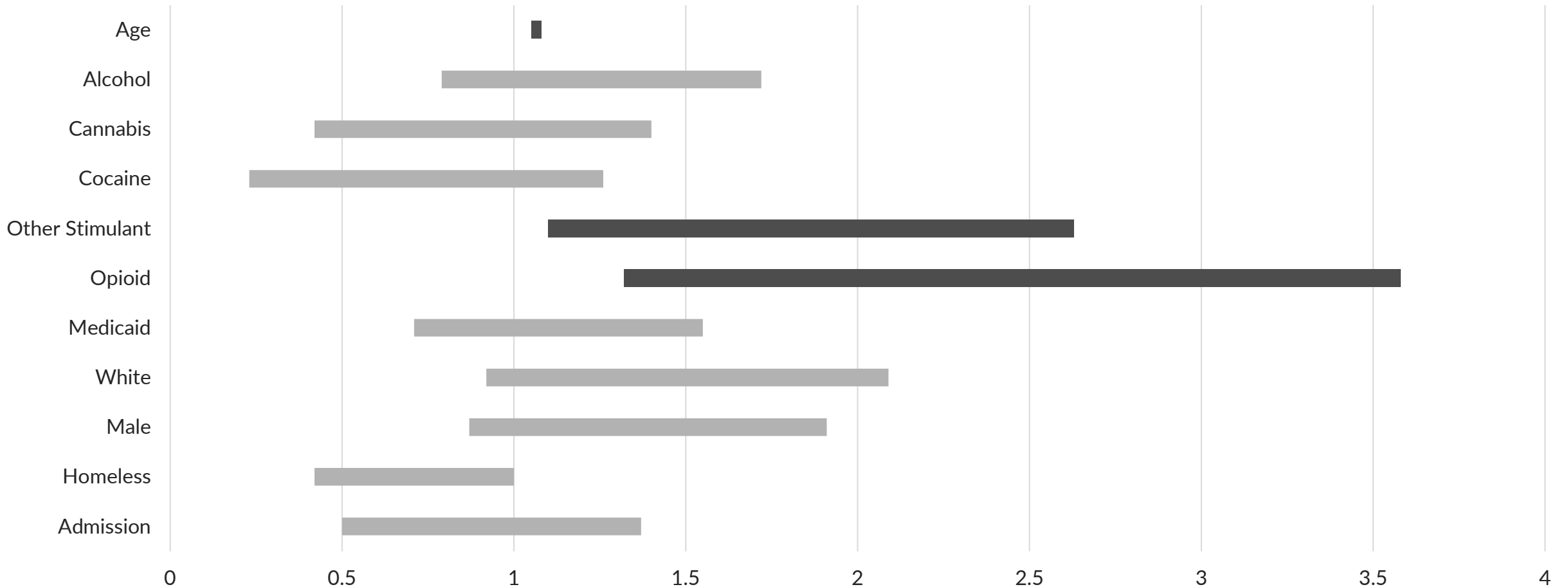


A Continuum of Disease



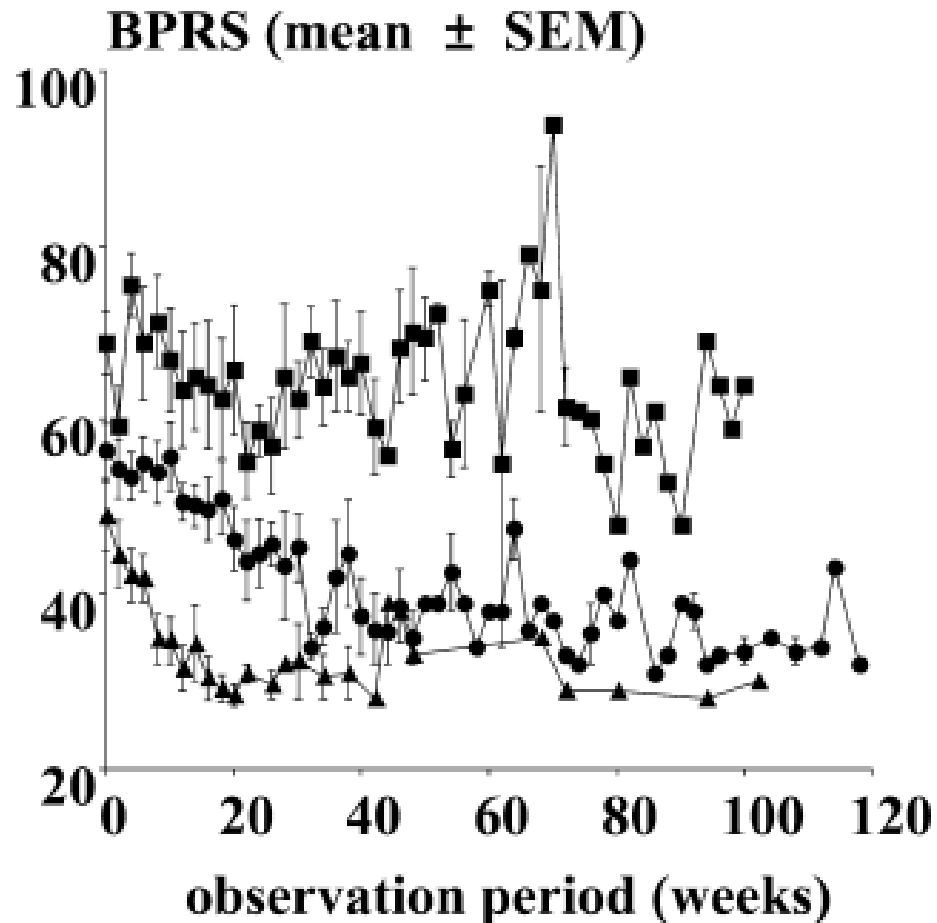
Mortality After PES Discharge

Risk Factors for Mortality 365 Days After Discharge



Meth Psychosis and Epidemiology

Psychosis After Sobriety



- Psychosis in 40% of methamphetamine users
- High rates of persistent psychosis after use: 10-30% after 6 months
- Many patients diagnosed with schizophrenia

Schizophrenia or Drugs?

<i>Methodology</i>	<i>Outcome</i>
Administering methamphetamine to healthy volunteers (Bell 1965 ² ; Bell 1973 ³)	“Amphetamine...produced a ‘model psychosis’ that has a closer resemblance to schizophrenia than that produced by any other...drug.”
Standardized interview of LSD-induced psychotic inpatients compared to schizophrenic patients (Vardy 1983 ⁴)	“In most respects the LSD psychotics were fundamentally similar to schizophrenics...”
Evaluation using standardized symptom scales of inpatients (Medhus 2013 ⁵)	“...no differences in positive psychotic symptoms between the two groups.”
Discriminant function analysis with standardized interviews and scales of inpatients (Srisurapanont 2013 ⁶)	“..the severity of psychotic symptoms, including the negative ones observed in MA psychotic and schizophrenic patients are almost the same.”

The DSM-5 Timeline



Identifying MIP

Helpful

Substance history

First psychosis

Functioning during periods of enforced sobriety

Collateral

Acute toxidrome

Less Or Not Helpful

Quality of psychosis

Prior diagnoses and treatment

Mood symptoms

Family history

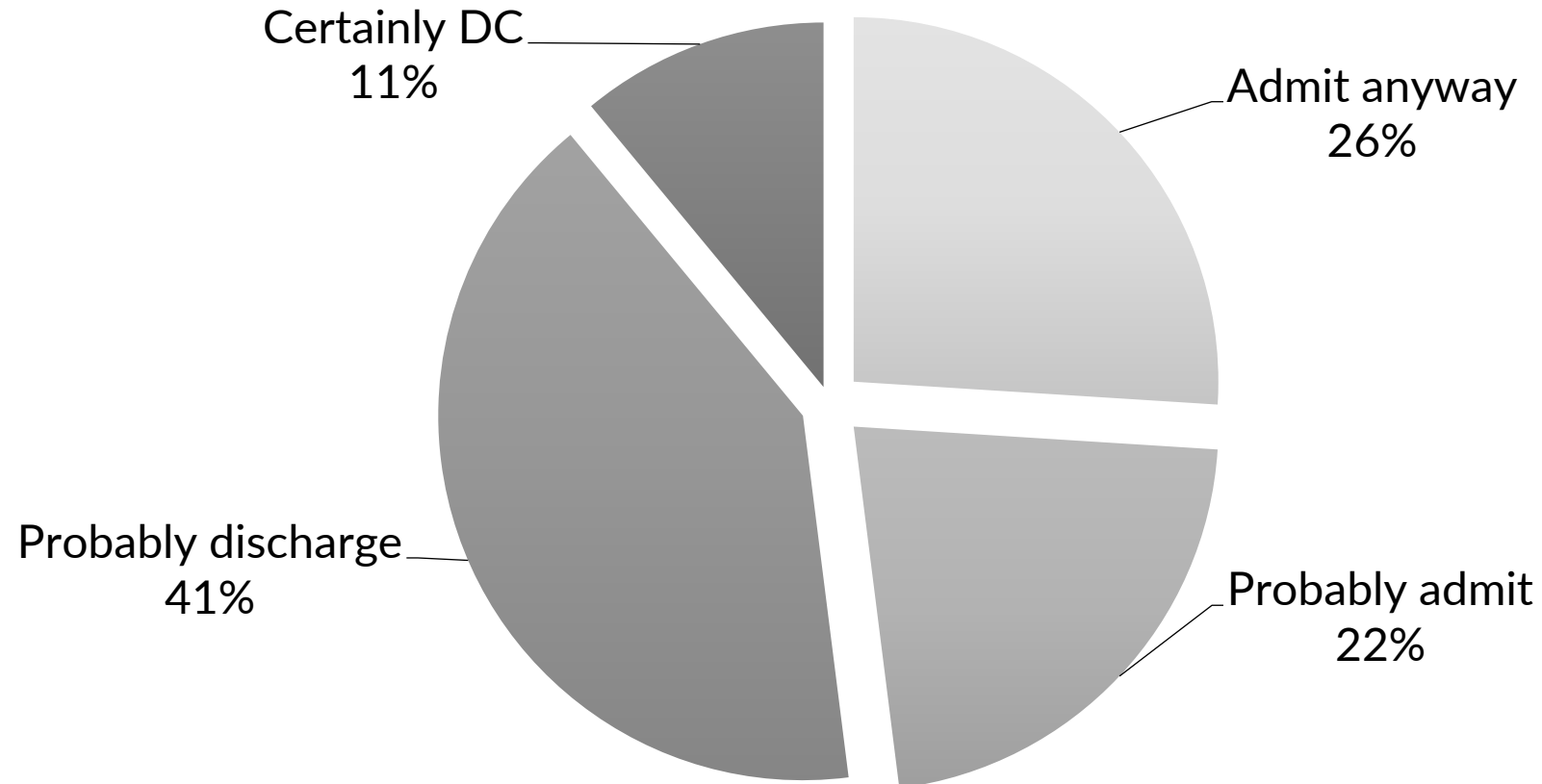


Pilot: Beginning Early and Assertive Treatment for Methamphetamine Psychosis

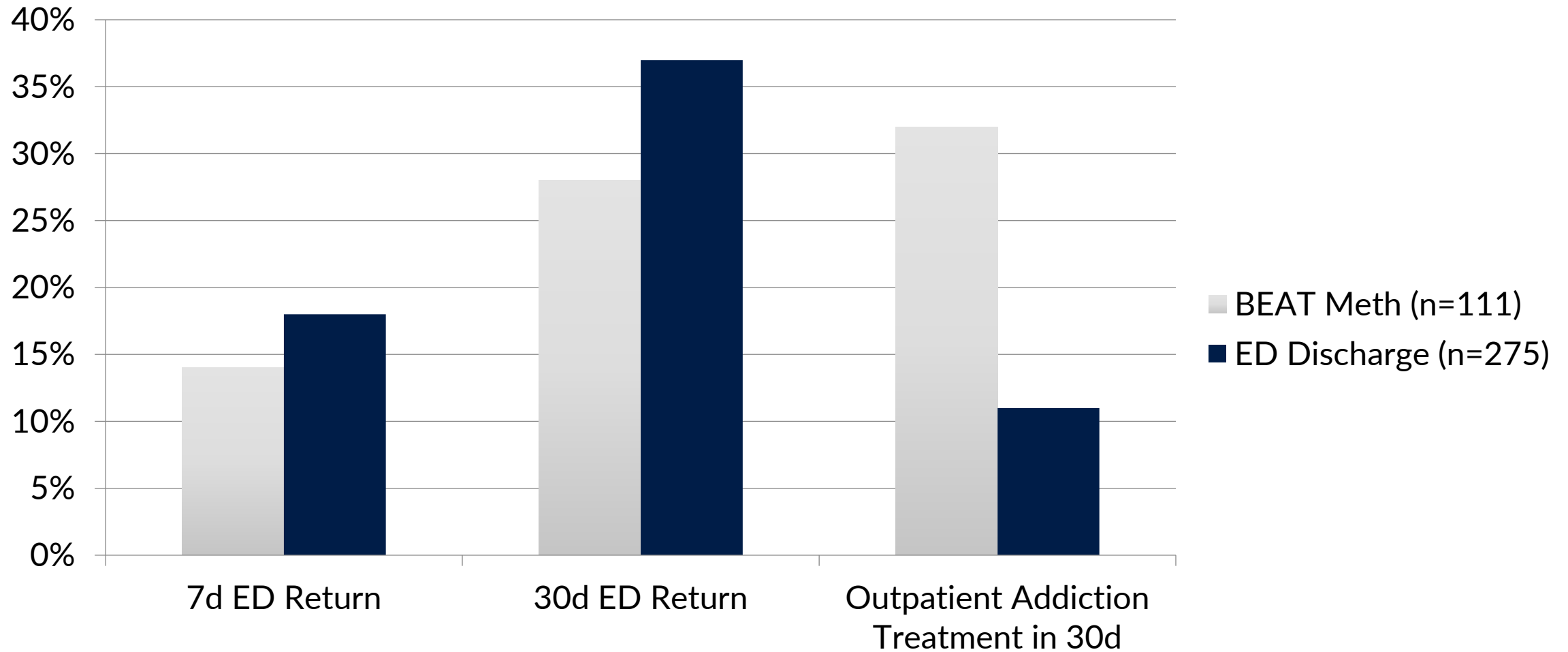
<i>Goal</i>	<i>Implementation</i>
Early recognition and disposition planning	Decision on disposition by hour 6 of ED visit
Early treatment	<ul style="list-style-type: none">• Antipsychotic• Long-acting benzodiazepine• As needed benzodiazepine• Urine acidification• Double meal portions• Monitored detoxification
Enhanced recovery environment	Anticipate 48-72 hour stay
Improved connection to follow-up care	<ul style="list-style-type: none">• Dedicated addiction counseling visit• Collaboration with Crystal Meth Anonymous• Enrollment in contingency management

BEAT Meth: Changing Expectations

If BEAT Meth were not available, how likely would you have been to admit this patient?



BEAT Meth Pilot Outcomes



Key Elements Of Management

Early recognition

Assertive medication management (protocolized?)

Withdrawal management of sufficient monitoring and duration

Clearly defined roles for different providers and services

Referral processes to support care transitions

Monitoring of intervention adherence

Aim 1: Evaluate and optimize the treatment pathway for patients presenting to the ED with methamphetamine use disorder.

- Develop standard work
- Build community partnerships
- Improve likelihood of patients entering treatment
- Create sustainable clinical workflows

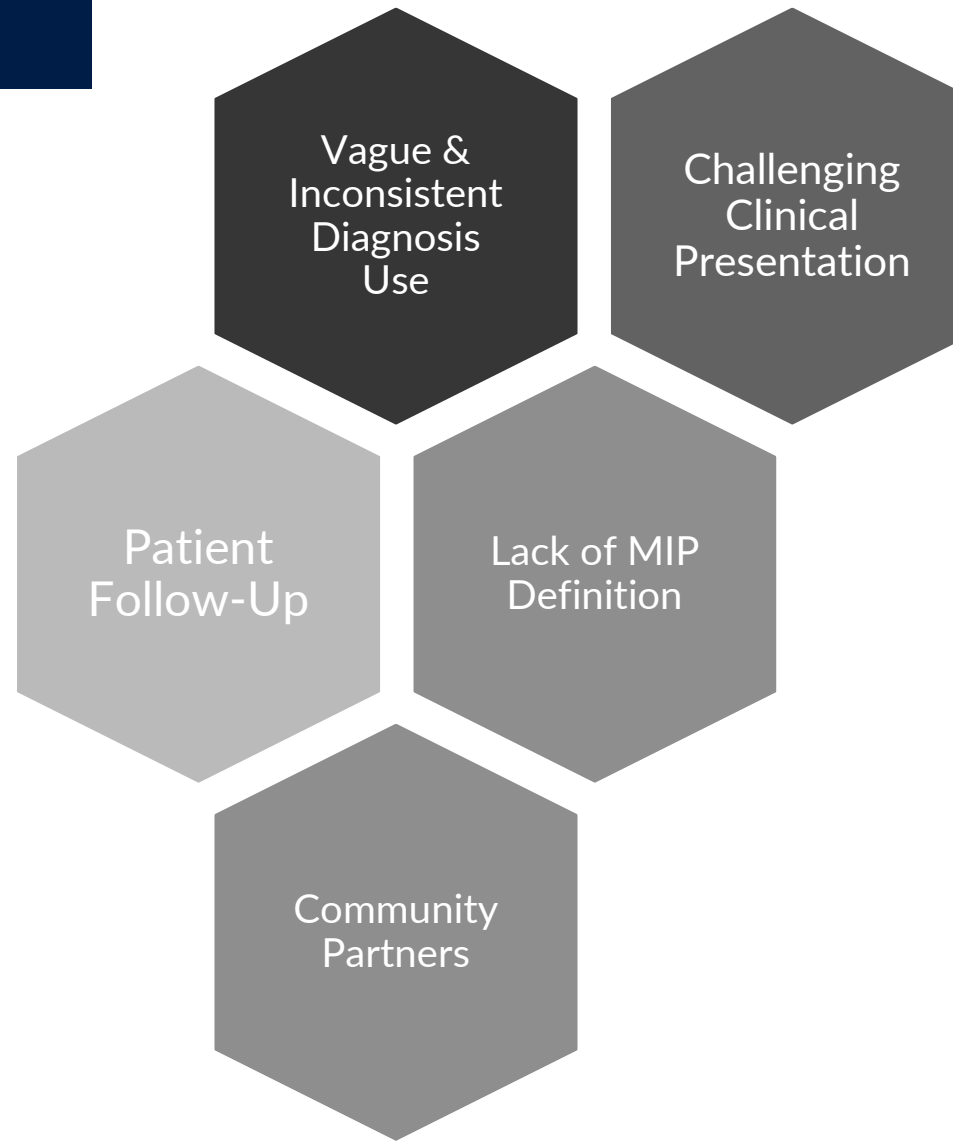
Aim 2: Evaluate a linkage-to-care intervention to engage and retain patients in treatment.

- Test a new case management intervention versus usual care in a randomized clinical trial with 182 subjects

Aim 3: Develop a methamphetamine use disorder continuum of care model to measure progression of patients with methamphetamine use disorder.

- Create a framework to monitor the prevalence of methamphetamine use disorder
- Monitor patients' progress in treatment
- Direct resources to at-risk populations

Barriers (So Far)



Key Takeaways

- Methamphetamine-induced psychosis should be suspected in any patient with a history of methamphetamine use who presents with psychosis.
- Patients using methamphetamine benefit from detoxification and treatment—as do any patients with addiction!
- Assertive treatment that includes symptom management and care connections improves the likelihood of treatment success.

Contact

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References

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