



**UW PACC**

Psychiatry and Addictions Case Conference

UW Medicine | Psychiatry and Behavioral Sciences

12/13/2018

**WELCOME!**

**Today's Topic:**

**Urine Drug Screens in OUD Treatment**

**Should I test and how should I do drug testing in my patients on opioid use disorder treatment?**

**Speaker: Jared Klein, MD, MPH**

**PANELISTS:**

**MARK DUNCAN, MD, RICK RIES, MD, KARI STEPHENS, PHD, AND BARB MCCANN, PHD**





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# URINE DRUG TESTING IN PATIENTS WITH OPIOID USE DISORDER

JARED W KLEIN MD MPH

UW SOM / HARBORVIEW

# GENERAL DISCLOSURES

The University of Washington School of Medicine also gratefully acknowledges receipt of educational grant support for this activity from the Washington State Legislature through the Safety-Net Hospital Assessment, working to expand access to psychiatric services throughout Washington State.

# SPEAKER DISCLOSURES

✓ No financial disclosures

Primary care internist – integrated addiction treatment

- *NOT a lab medicine specialist*
- *NOT discussing non-urine matrices*
- *NOT covering specialty settings or populations*

# OBJECTIVES

After this talk learners will be able to...

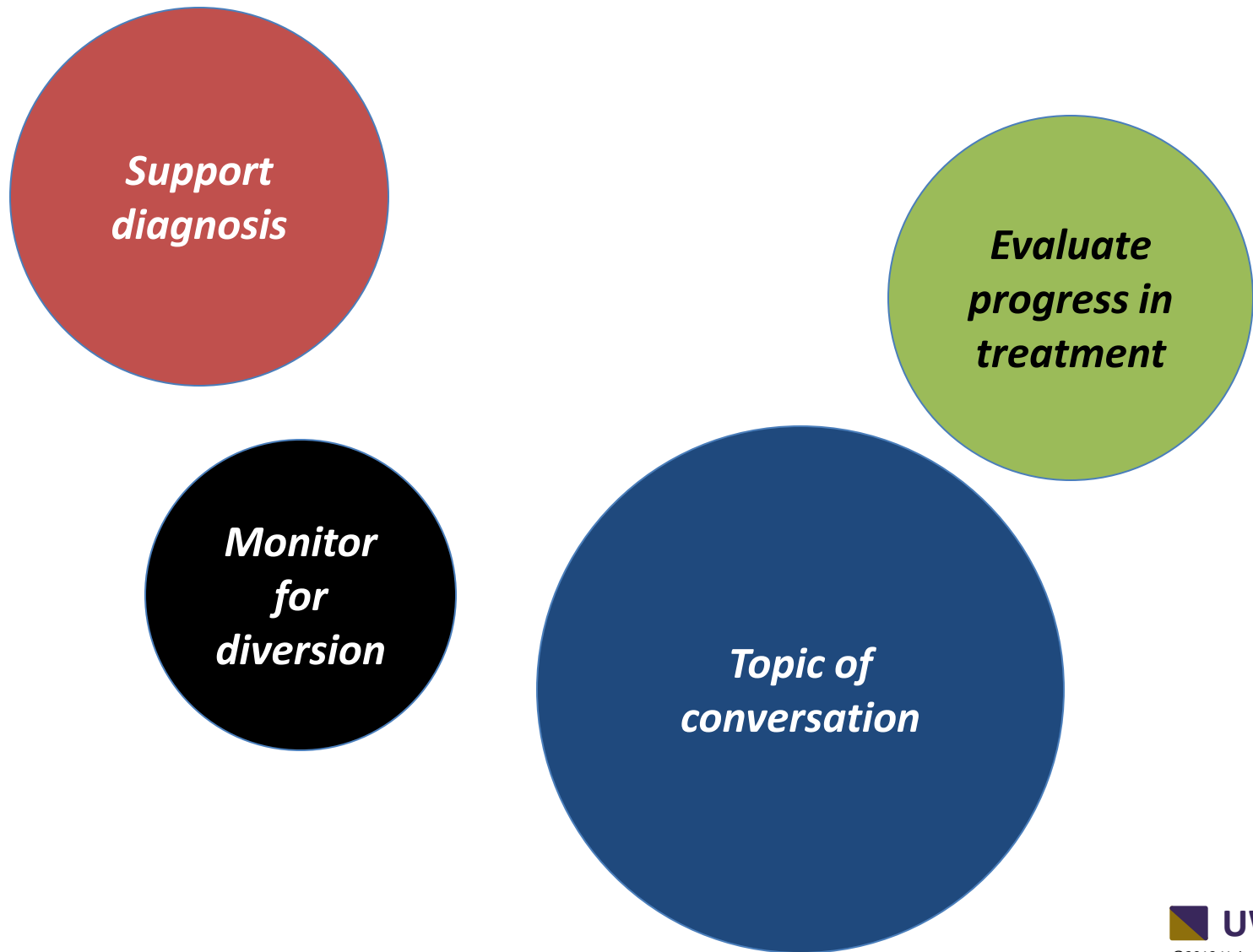
1. Name four potential justifications for employing urine drug testing
2. Understand at least two differences between screening and confirmatory urine testing
3. Identify common pitfalls of urine drug testing algorithms

# OUTLINE

- Philosophy
- Tests
- Pitfalls



# PHILOSOPHY



# PHILOSOPHY



*Support  
diagnosis*



# PHILOSOPHY



# PHILOSOPHY

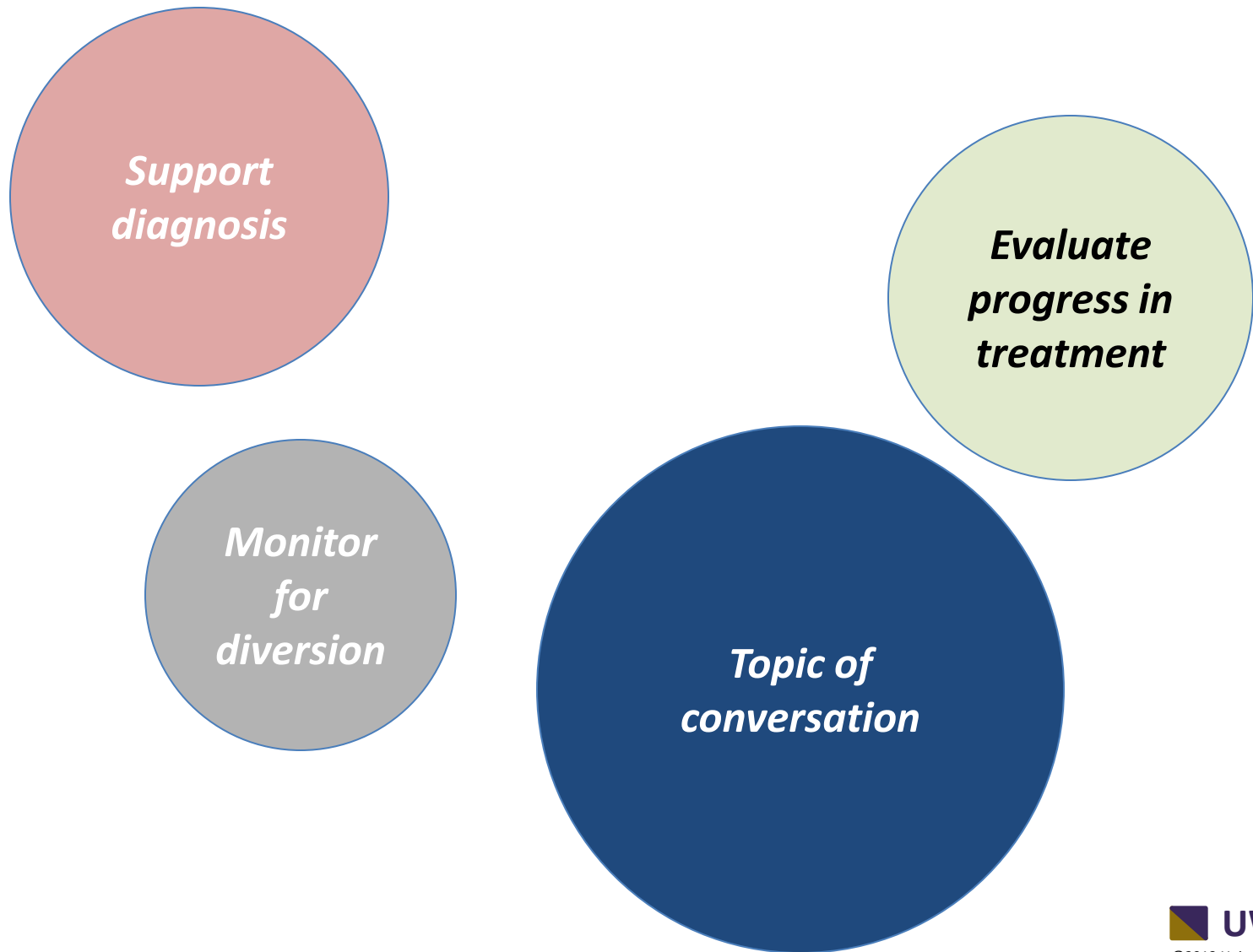


*Support  
diagnosis*

*Evaluate  
progress in  
treatment*

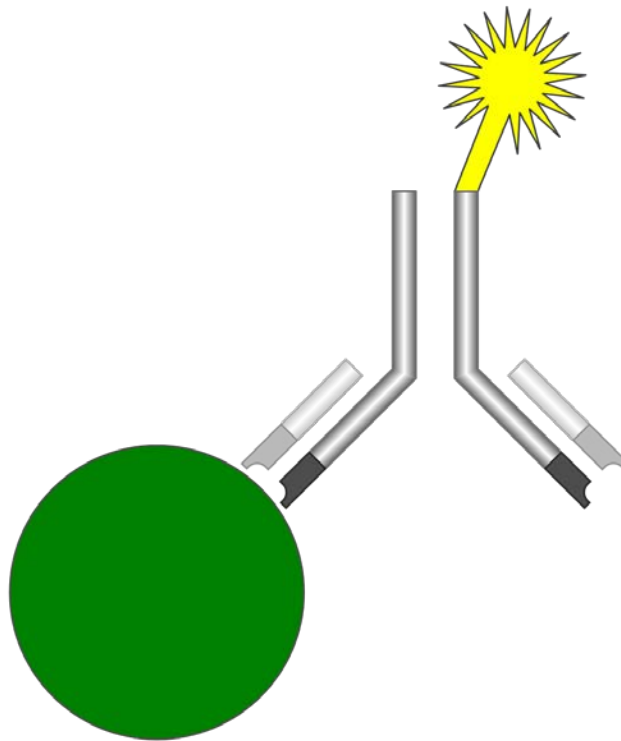
*Monitor  
for  
diversion*

# PHILOSOPHY



# TESTS

- Immunoassay (aka ELISA)



Amphetamine

THC

Opiate

Cocaine

PCP

*Benzodiazepine*

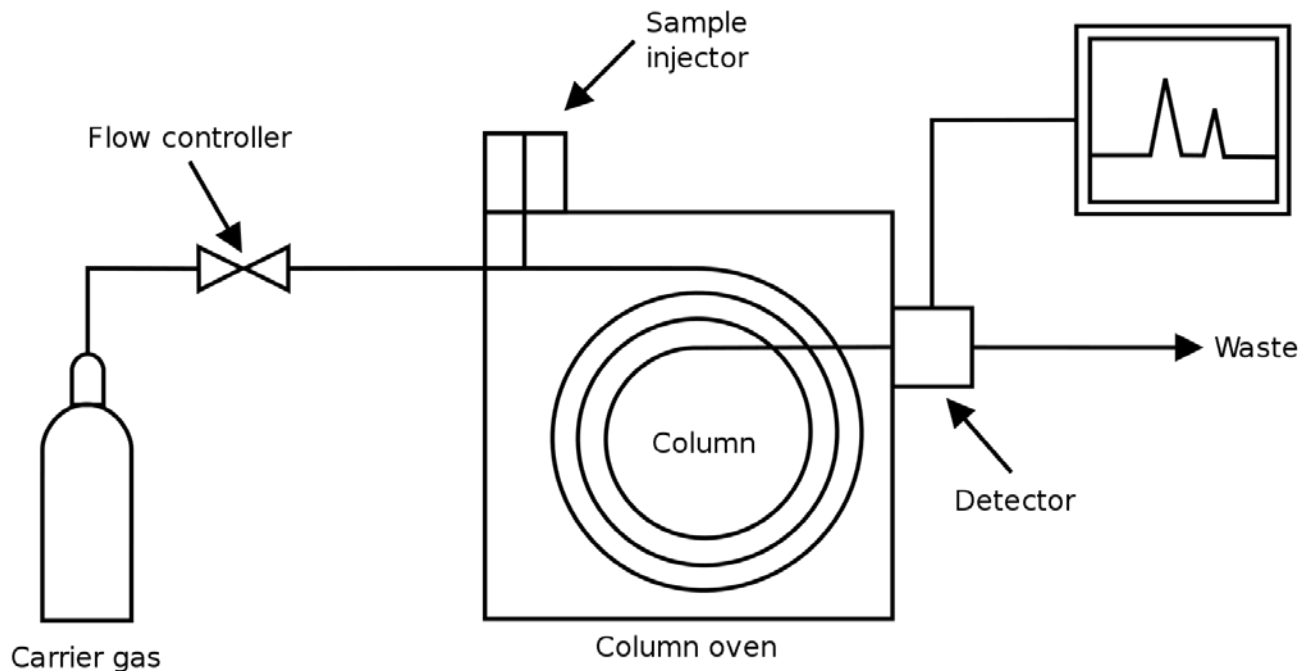
*Methadone*

*Oxycodone*

*Others (fentanyl, bupe,  
barbiturate, etc.)*

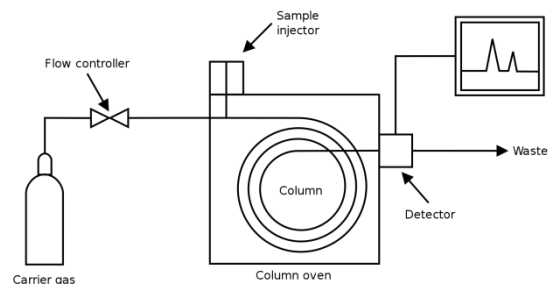
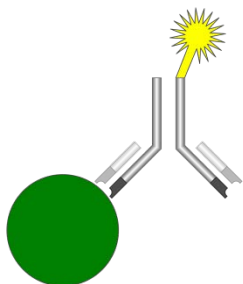
# TESTS

- Gas chromatography/mass spectrometry (GC/MS)



**\*\*\*Can detect dozens of unique substances\*\*\***

# TESTS



Immunoassay	GC/MS
Cheap	Expensive
Rapid	Slow
More false positives/false negatives	Accurate

# TIPS & PITFALLS

- Test at least monthly
  - Random urines preferred, but logistically difficult
- Always ask about anticipated results
  - Last substance used, timing of last use
- Never order quantitative testing
  - Expensive and rarely helpful
- Language matters
  - “Positive/negative” preferred over “clean/dirty”

# TIPS & PITFALLS

- All tests can provide in false positives
  - Don't rely on a single test result!
- Common false positives
  - Dextromethorphan → opiate
  - SSRIs → amphetamines
  - Sertraline → benzodiazepines

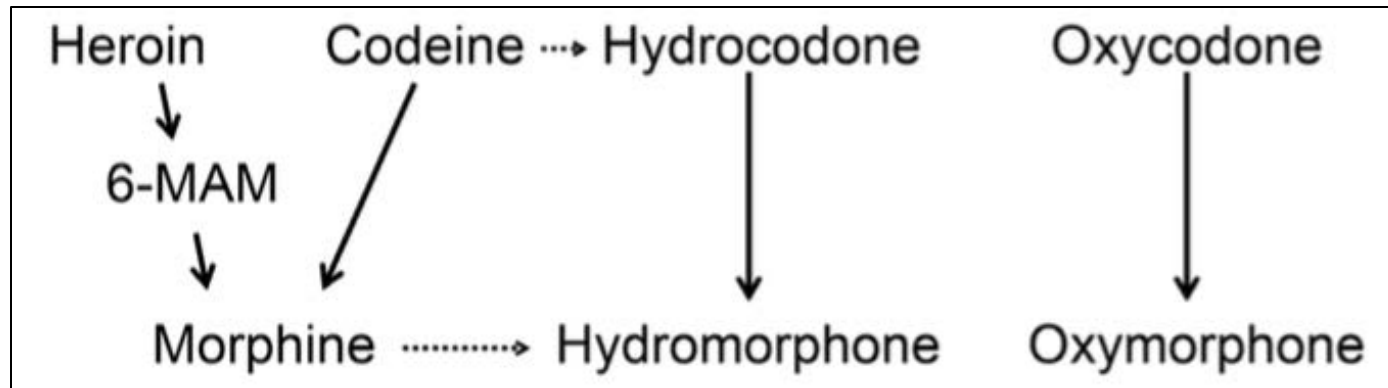


# TIPS & PITFALLS

- All tests can provide in false negatives
  - Don't rely on a single test result!
- Common false negatives
  - Benzodiazepine → clonazepam, Z-drugs
  - Amphetamine → MDMA
  - THC → synthetic cannabinoids
  - Opiates → synthetic/semi-synthetic (next slide)

# TIPS & PITFALLS

- Opioid metabolism
  - Opiates (morphine, codeine, heroin)
  - Semi-synthetic opioids (oxycodone)
  - Synthetic opioids (fentanyl, methadone, bupe)



# REFERENCES

- Appropriate Use of Drug Testing in Clinical Addiction Medicine (ASAM 2017)
- Drug Testing: A White Paper of the American Society of Addiction Medicine (ASAM 2013)
- URINE DRUG TESTING: A Reference Guide for Clinicians (Starrels and Wu, 2013)
- Office-Based Opioid Treatment Policy and Procedure Manual (Harborview, 2018)