

## Introduction

In the United States, an estimated 2.1 million people meet criteria for opioid use disorder (OUD). Over 30% of individuals with OUD meet criteria for posttraumatic stress disorder (PTSD). Although opioid agonist treatment (OAT e.g., buprenorphine, methadone) is the most efficacious treatment for OUD, individuals with concurrent PTSD experience worse outcomes. Prolonged exposure therapy (PET) may reduce PTSD symptom severity among patients receiving concurrent OAT. However, PET's effectiveness may be limited by poor attendance. Here we present preliminary attendance data from a pilot study investigating the effect of attendance-based monetary incentives for increasing attendance to PET sessions among adults with co-occurring OUD and PTSD.



## Methods

Adults maintained on OAT with a current diagnosis of PTSD are randomized to one of three groups:

- OAT as usual (OAT; n = 6)**
  - Continue to receive buprenorphine or methadone
- OAT + PET (OAT + PET; n = 5)**
  - Continue to receive buprenorphine or methadone
  - Twelve 60-minute individual sessions of PET with trained therapist
- OAT + Enhanced PET (OAT + PET +; n = 5)**
  - Continue to receive buprenorphine or methadone
  - Twelve 60-minute individual sessions of PET with trained therapist
  - Monetary incentives contingent on completion of PET sessions

- All participants have follow-up assessments at 4-, 8-, and 12- weeks post-randomization and receive \$50 for completion of monthly assessment.

### Intervention – Prolonged Exposure Therapy (PET)

- Empirically supported and first-line treatment for PTSD
- Disrupts the cycle of anxiety and avoidance that characterizes PTSD via deliberate and systematic exposure to previously avoided memories

### Analytic strategy

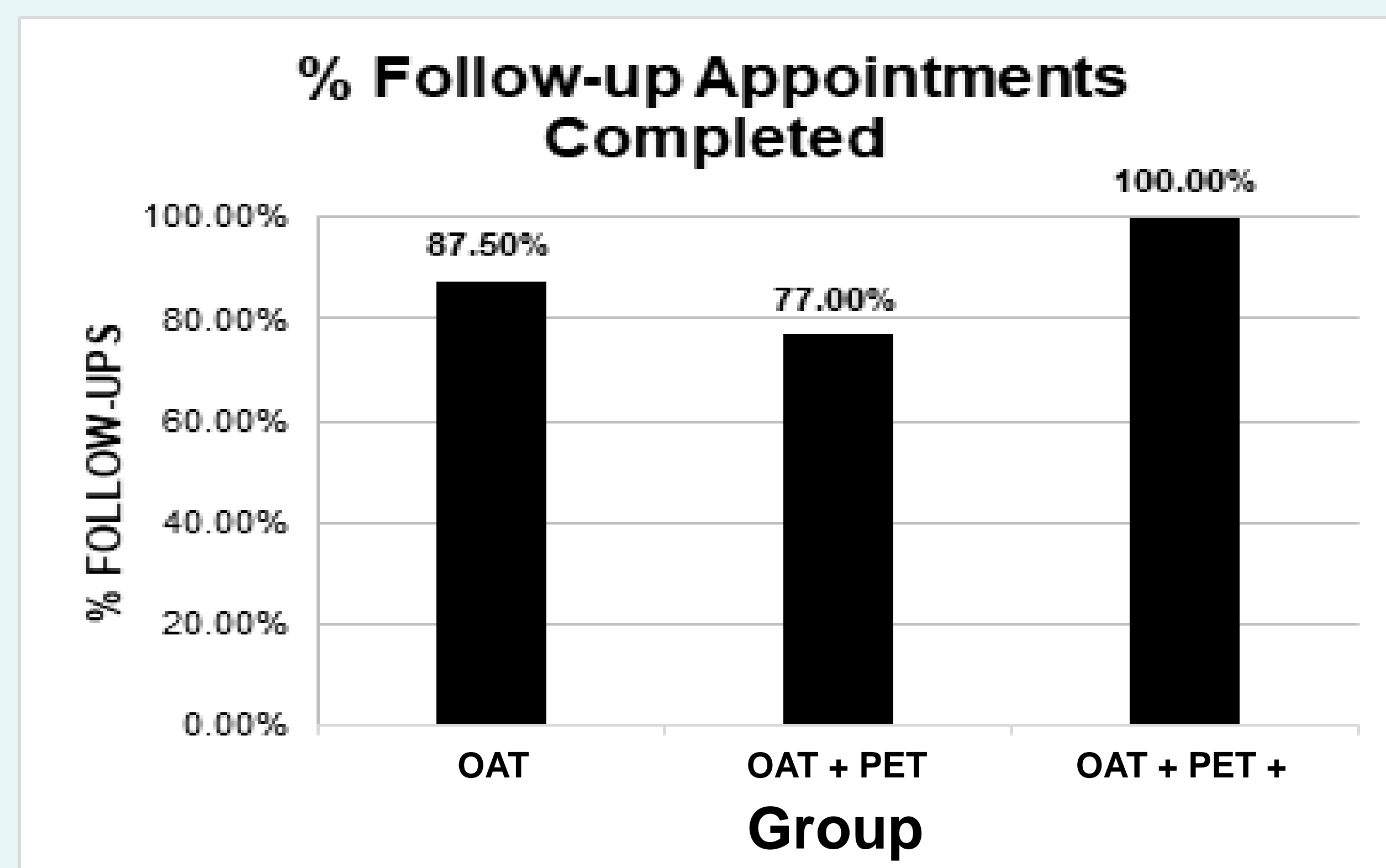
- Between-groups ANOVA comparing PET session attendance

### OAT + Enhanced PET incentive program

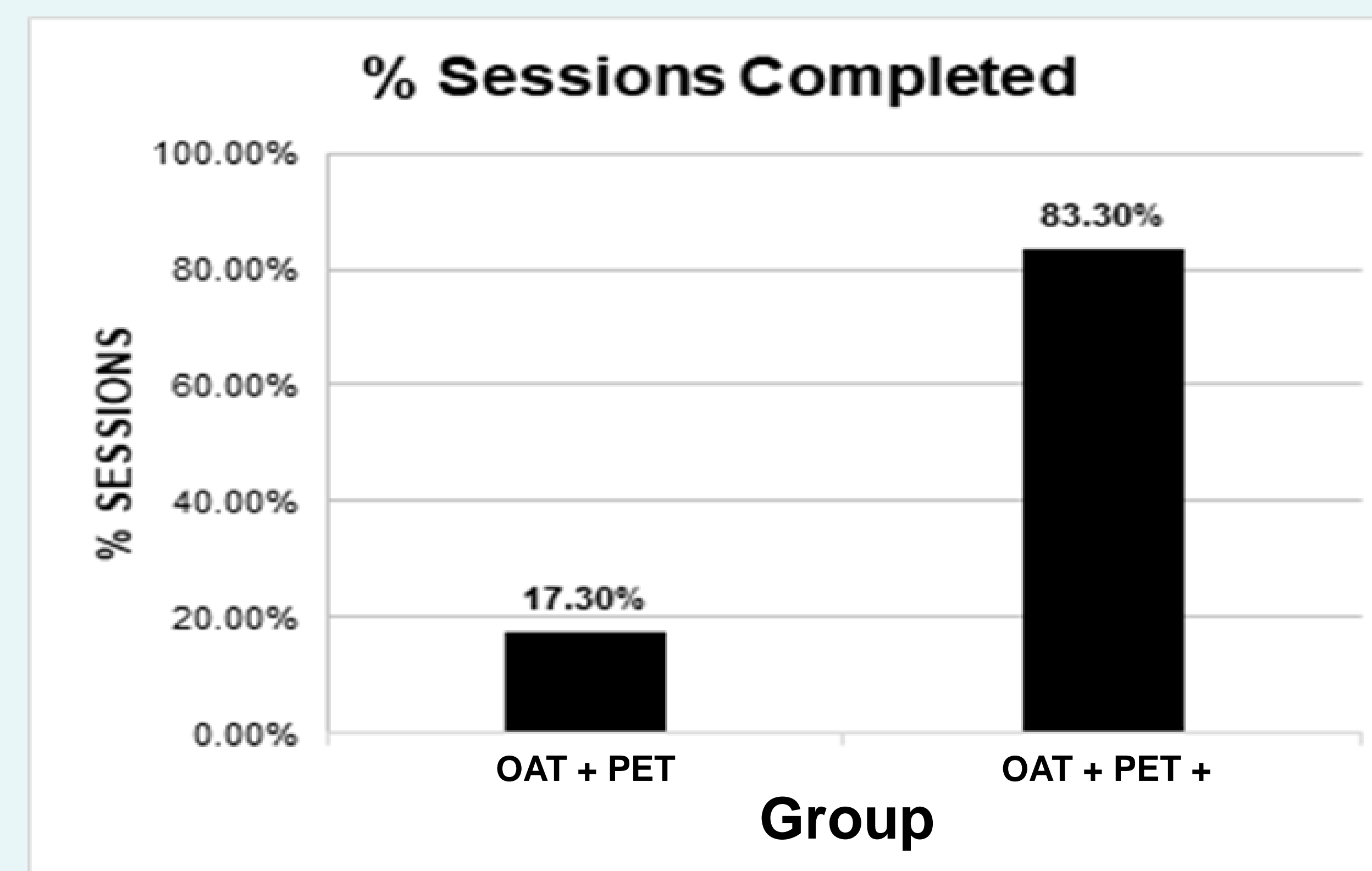
Session	Incentive	Bonus
1	\$20	
2	\$25	\$50
3	\$30	
4	\$35	\$50
5	\$40	
6	\$45	\$50
7	\$50	
8	\$55	\$50
9	\$60	
10	\$65	\$50
11	\$70	
12	\$75	\$100
Total earnings	\$570	\$350
Maximum possible total earnings: \$920		

## Results

The sample was predominantly female (68.8%), middle aged (mean age = 36 years), and exclusively white (100%) with an average of 13.4 years of education. On average, participants had used opioids for 7.8 years (daily/almost daily) and had been receiving OAT for 5.0 years.



Attendance for follow-up assessments was similar for the OAT as usual (87.5%), OAT+PET (77.0%), and OAT+PET+ groups (100%;  $p > .05$ ).



The OAT+PET+ group attended more PET sessions (50/60) compared to the OAT+PET group (9/53,  $p = .001$ ), including more exposure sessions (OAT+PET+ mean = 7; OAT+PET mean = 0.6;  $p < .01$ ).

## Discussion

- The greatest limitation to the use of PET for PTSD in individuals with OUD is poor attendance
- Incentives may be used as a tool to help rural individuals who face significant barriers to treatment receive the maximal benefit of PET
- An ongoing trial is examining the effect of PET above and beyond OAT alone for reducing PTSD symptoms among adults with PTSD and OUD

## References

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