

## Introduction

- Discontinuation at 30-days of buprenorphine treatment for opioid use disorder ranges from 31% to 58% (Morgan et al., 2018)
- Need interventions for early treatment engagement
- Contingency management (CM) reduces opioid use and increases methadone retention (Bolivar et al., 2021)
- Less known: CM for buprenorphine in real-world settings

## Aims

- Characterize opioid use for newly enrolled opioid clinic patients
- Examine CM efficacy for attendance and treatment adherence at first, second, and third weekly follow-up appointments

## Procedures and Participants

- U.S. adults (N=51) at outpatient opioid drop-in clinic
- Newly enrolled in buprenorphine treatment (induction visit)
- Randomized to:
  - Treatment as usual (TAU, n=25)
    - Conducted by clinic staff
    - Next appointment scheduled or attended drop-in clinic
  - Contingency management (CM, n=26)
    - Same procedures as TAU
    - Debriefed by study staff, received \$50 on reloadable debit card for attending first follow-up visit after randomization
    - For the second and third follow-up, received \$15 for attendance and \$10 for a treatment-adherent urine sample

**Table 1. Demographics (% or mean(SD))**

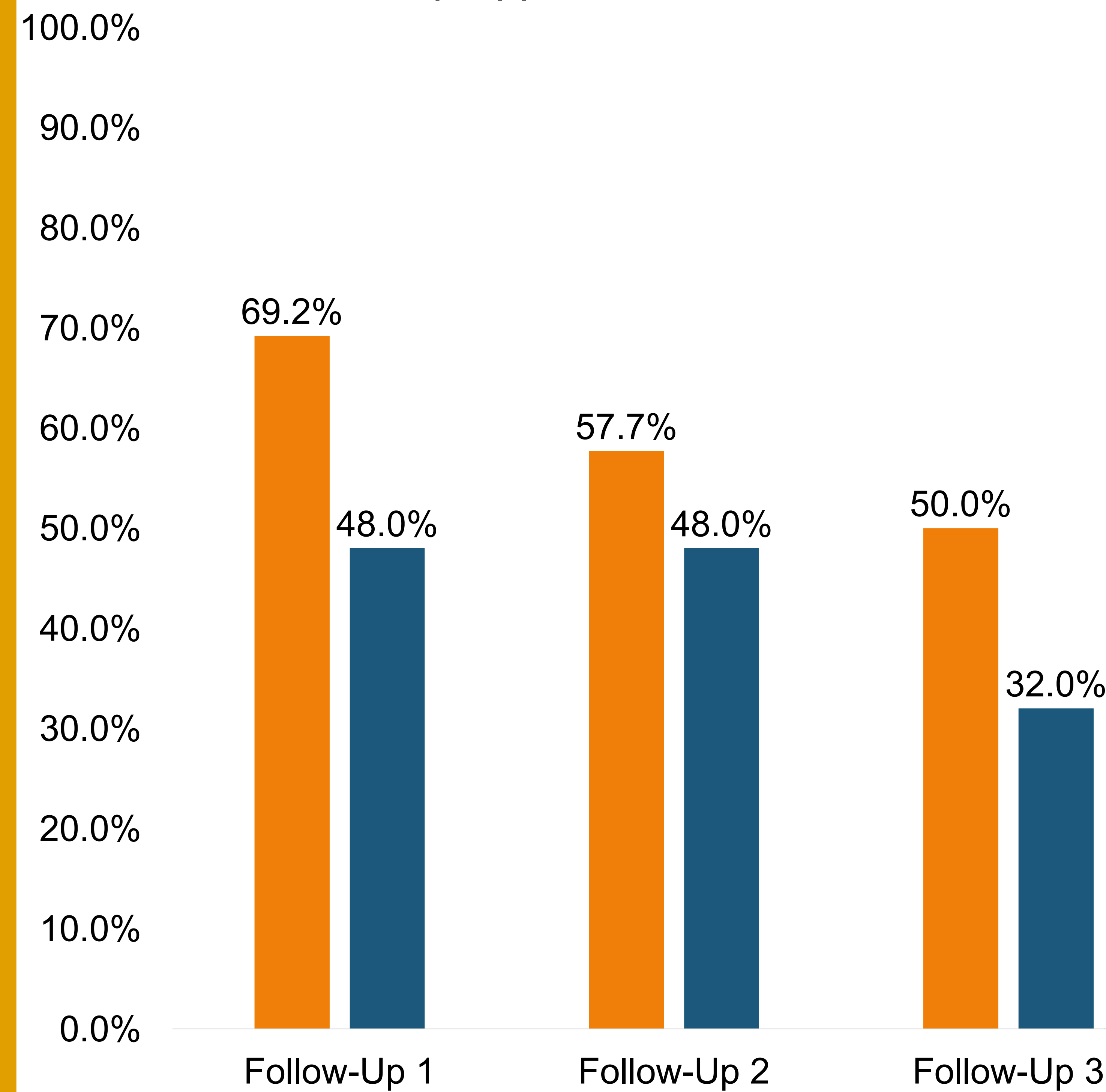
|                                 |                                      | Total<br>(n=51)  | CM<br>(n=26)    | TAU<br>(n=25)    |
|---------------------------------|--------------------------------------|------------------|-----------------|------------------|
| Age                             |                                      | 41.10<br>(10.30) | 42.15<br>(9.26) | 40.00<br>(11.36) |
| Gender                          | Male                                 | 62.7%            | 57.7%           | 68.0%            |
| Race                            | Black                                | 49.0%            | 42.3%           | 56.0%            |
|                                 | White                                | 33.3%            | 38.5%           | 28.0%            |
|                                 | Native Hawaiian/<br>Pacific Islander | 3.9%             | 3.8%            | 4.0%             |
|                                 | Other                                | 13.7%            | 15.4%           | 12.0%            |
| Spanish,<br>Hispanic,<br>Latino |                                      | 9.8%             | 7.7%            | 12.0%            |
| Education                       | Less Than High School                | 17.6%            | 19.2%           | 16.0%            |
|                                 | High School                          | 51.0%            | 30.8%           | 72.0%            |
|                                 | Some College                         | 21.6%            | 38.5%           | 4.0%             |
|                                 | College Degree                       | 9.9%             | 11.4%           | 8.0%             |
| Household Income                | Less Than \$10,000                   | 39.2%            | 34.6%           | 44.0%            |
|                                 | \$10,000-\$19,000                    | 19.6%            | 15.4%           | 24.0%            |
|                                 | \$20,000+                            | 41.1%            | 49.9%           | 32.0%            |
| Employment                      | Working                              | 23.5%            | 30.8%           | 16.0%            |
|                                 | Not Working                          | 76.5%            | 69.2%           | 84.0%            |

## Results

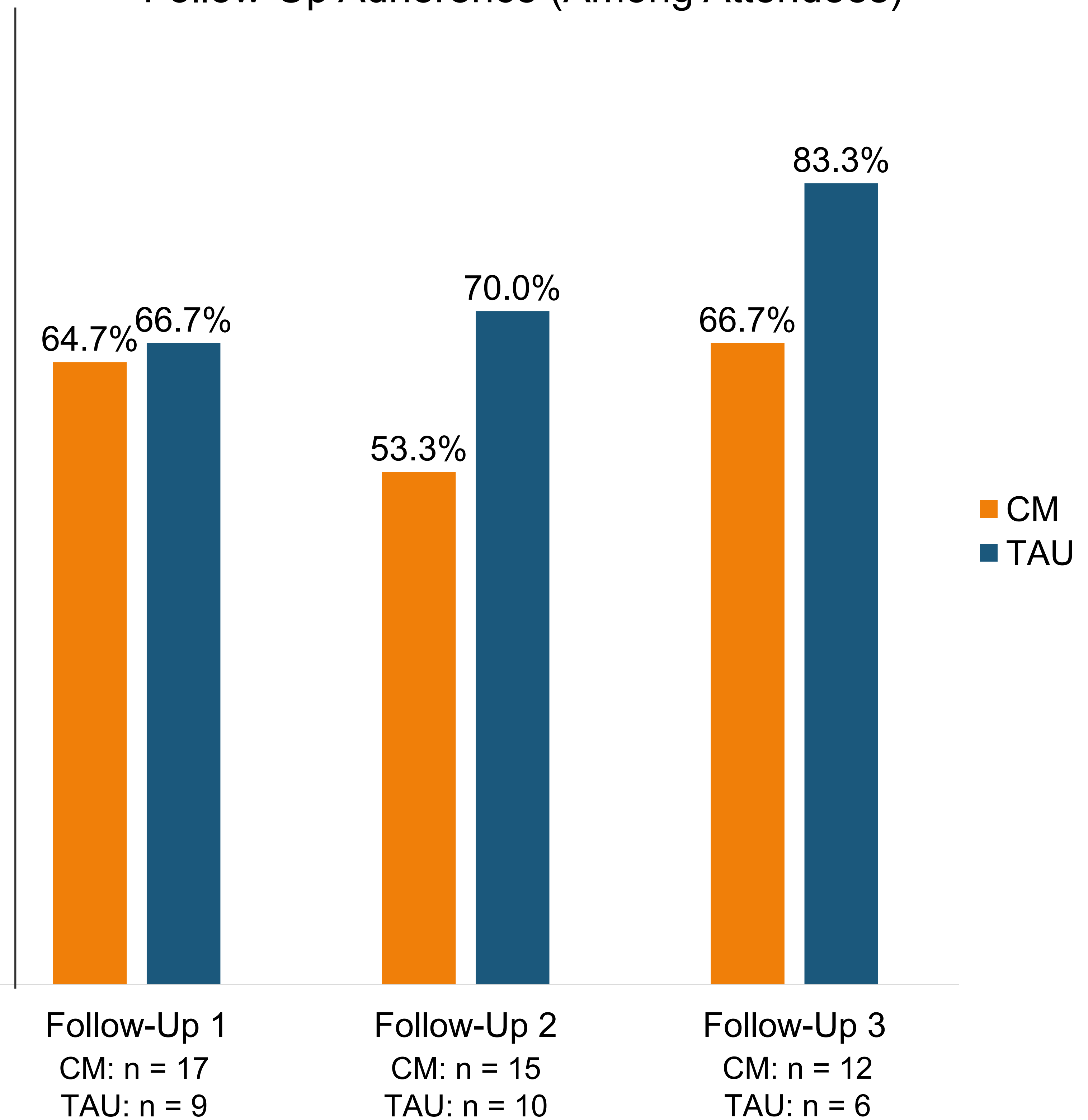
**Table 2. Baseline Opioid Use Duration and Methods, Total Sample (% or mean(SD))**

|                         | Non-Prescription | Prescription |
|-------------------------|------------------|--------------|
| # Days Use (Past Month) | 12.27 (13.24)    | 5.26 (10.61) |
| # Years Use (Lifetime)  | 9.37 (10.25)     | 5.75 (7.34)  |
| Method - Oral           | 2.0%             | 45.1%        |
| Method - Nasal          | 45.1%            | 13.7%        |
| Method - Smoking        | 3.9%             | 0.0%         |
| Method - IV Injection   | 29.4%            | 0.0%         |

### Follow-Up Appointment Attendance



### Follow-Up Adherence (Among Attendees)



## Measures

### Demographics

- Age, Gender, Race, Ethnicity, Education, Household Income, Employment

### Attendance at First, Second, and Third Follow-up Appointments

- Yes
- No

### Treatment Adherence at First, Second, and Third Follow-up Appointments

- Yes (urine positive for buprenorphine and negative for other opioids)
- No

### Addiction Severity Index (structured interview, shortened version)

- Prescription and non-prescription opioids:
  - Number of days use in past month
  - Number of years of regular use in lifetime
  - Method: oral, nasal, smoking, intravenous (IV) injection

## Discussion

- Sample diverse, low income and low employment
- Wide range in past-month use, lifetime use, and method
- CM group: higher for first, second, and third follow-up visit attendance than TAU
  - Relatively similar adherence across groups (small sample)
- Limitation: group differences in demographics
- Results promising for CM and early intervention engagement in a real-world clinic

## Future Directions

- More fine-grained comparisons, examining behavioral economic and other predictors of attendance and adherence
- Longitudinal data (3-month)