Contingency Management for Medication Assisted Treatment Program (MAT) – Homeless Persons Health Project (HPHP)

Background: Contingency management (CM) is the application of tangible positive reinforcers to change behavior, and specifically substance-using behavior. This evidenced based practice is effective in medication-assisted treatment programs that target stimulant use for patients being treated for opioid use disorder. At HPHP, the contingency management pilot program will broaden patient selection to include all MAT patients who have positive urine drug screens (UDS), with the exception of buprenorphine and THC, and are in tiers two and three. The CM program at HPHP will be lead by the MAT Clinic Nurse III, with eligible patients participating for a duration of 12 continuous weeks. The total supplies budget for the 12 week pilot is $1,500. The pilot will be evaluated and presented to MAT Steering Committee as well as Quality Mangement Committee using a Plan, Do, Study, Act (PDSA) format.

Hypothesis: Patient attendance and negative UDS % will increase during the 12 week CM program.

Patient Selection: MAT patients in tiers two and three who test positive on urine drug screen (UDS) for substances other than buprenorphine and THC. *Ideal candidates will test positive for 3 out of 4 weeks or more prior to starting contingency management. Sample size will be large enough to evaluate effectiveness of contingency management, with outcome demonstrated as a reduction in substance use from pre-CM baseline (a simple pre-during study design).*

Procedure:

- MAT RN and MHCS work together to identify patients for CM program.
- Inform patient about CM program. Information about CM program occurs during initial intake as well as during support groups.
- Have a short contract/consent signed by the patients, explaining the procedure, what the expectations are and making sure that they have interest in discontinuing substance use. Program is regularly introduced to support group during implementation.
- Use Point of Care UDS and result in Epic immediately.
- Send out for confirmation only if a positive result is contested.
- Continue to monitor UDS for duration of 12 week program for MAT patients in Tier 2 and Tier 3. Clinic Nurse III tracks all data from Epic in excel spreadsheets.
- Prizes will be awarded the same day for negative UDS results. Any patients who arrive late will have any prizes earned given at the clinic after group has concluded.

Tier 2 (weekly requirement)

1. **Submit Urine Drug Screens 2X per week. (Tuesdays and Fridays)**
    a. Earn one prize drawing from the fishbowl for the first UDS negative for any substances, with the exception of THC and buprenorphine.
    b. Earn two additional entries for the second UDS negative for any substances, with the exception of THC and buprenorphine.
2. **Each week there will be a total possible of three prize drawings.**
    a. If patient does not show up, there will be no prize drawing awarded for that day.
    b. If patient has a positive UDS, no prize drawing will be awarded for that day.

Tier 3 (bi-weekly requirement)

1. **Submit Urine Drug Screen 1x every other week as required (Tuesday MAT group)**
   a. Earn one prize drawing from the fishbowl for the negative UDS, with the exception of THC and buprenorphine.
   b. Patient who is on Tier 3 is only required to come bi-weekly. Patient will only have one chance to test and draw at their required group. Tier 3 timeframe is 12 weeks which will allow for 6 group attendances max. If patients on Tier 3 come outside their group or every week they still will only get to participate according to their bi-weekly requirement.

Prize drawings will be in the form of giftcards ranging from $5-$50 and positive affirmations.

Example for Tier 2:

Patient X has come to his Tuesday appointment but has had a positive UDS. No prize drawing will be awarded this day, but will receive a candy just for showing up to group. On Friday patient X has a negative UDS and has earned one prize drawing which will be awarded during the next Tuesday group.

Example for Tier 3:

Patient Y has come to his Tuesday appointment and has a negative UDS. One prize drawing will be awarded during group session. Patient Y does not need to come to the 2nd testing day that week that is required for Tier 2 patients. Patient who chooses to come to the next Tuesday group (which is additional) or to any extra groups which is not required, will not participate in CM. Patient Y will only earn one prize drawing awarded during their required group session. Tier 3 patients have 6 chances to draw from the fish bowl utill they promote to Tier 4, provided they submit consistent negative UDS tests.

Plan: We will pull data from our 12 week program to track attendance, UDS results, prize entries earned, and prizes awarded. We will track and graph data separately by Tier status (Tier 2 vs Tier 3). In addition, we will also track UDS results (Stimulant use vs Opiate Use). With this data we are able to measure the percentage of decreased substance use and attendance throughout all 12 weeks of the program. We will use an Excel spreadsheet with a graph to show the data of patients receiving contingency management. We could also pull strictly the patients who have been testing positive for stimulants to isolate that data.

If possible, it would be great to compare the UDS from the pre period (% positive) to the % positive during the 12 week CM/incentives period. This could be done in aggregate or per subject. And it would be even better if these same data could be presented for a group of people with stimulant use who did not participate in the trial. (Just using their routine UDS results).

Pre-period Results: Nine patients who consistently come to Tuesday MAT group were selected to evaluate the UDS results for the 6 weeks prior to the start of the CM program. There were a total of 47 UDS submitted. Of the 47 tests, 70% were positive for any substances other than THC or bup. Of the 70% positive results, 66% of the tests had combined stimulant use.

Evaluation: After the 12 week program has ended we will ask our patients who have participated for an evaluation of the program. With the feedback, we can make any necessary changes for future contingency management programs.