

Pre-Analysis Plan
The Impact of Cash Transfers for Rapid Rehousing Clients

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I. Introduction

More than half a million individuals in the U.S. are homeless at a point in time (HUD, 2022). Rapid Re-Housing (RRH) programs are an increasingly common policy response designed to help people transition from homelessness to stable housing. These programs offer a combination of temporary benefits that typically last between 6 and 24 months, such as housing identification assistance, rental subsidies, and case management. Despite these benefits, 28% of individuals return to homelessness within a year after exiting RRH (Walton et al, 2018). Anecdotal evidence suggests that a primary reason many return to homelessness is they still do not have a sufficiently stable income stream when the rental subsidies expire. We explore one possible way to bridge the gap: offering cash transfers to participants the year after exiting RRH. We quantify the impact of cash transfers through a randomized controlled trial (RCT), randomly offering monthly payments totaling approximately \$13,000-\$16,000 over 12 months. Our target sample is 990 individuals exiting RRH across five counties in the San Francisco Bay area. Using administrative data, we will measure the impact of cash transfers on homelessness, housing stability, financial security and other outcomes one and two years after enrollment.

II. Evaluation Design

Implementation Partner

Our research partner, Abode Services, is a nationally recognized leader in housing and has deep experience with the target population. Abode has already allocated significant resources toward designing and implementing the program, such as through interviews with RRH participants about barriers to economic mobility, equality, and well-being long-term. These learnings are incorporated directly into the design of payments, like a payment covering at least 50 percent of rent costs, larger payments for families, and payments that are larger at the beginning. Abode has a proven track record of collaborating and co-creating with researchers. In 2015, Abode implemented a pay-for-success RCT that examined the impact of permanent supportive housing (Raven, Niedzwiecki, & Kushel, 2020). Consequently, Abode has a deep awareness of the challenges associated with RCTs, including the need for resources, recruiting study participants, obtaining consent, informing participants about lottery outcomes, and managing the data requirements for the study. Abode's body of knowledge is critical to the success of the intervention

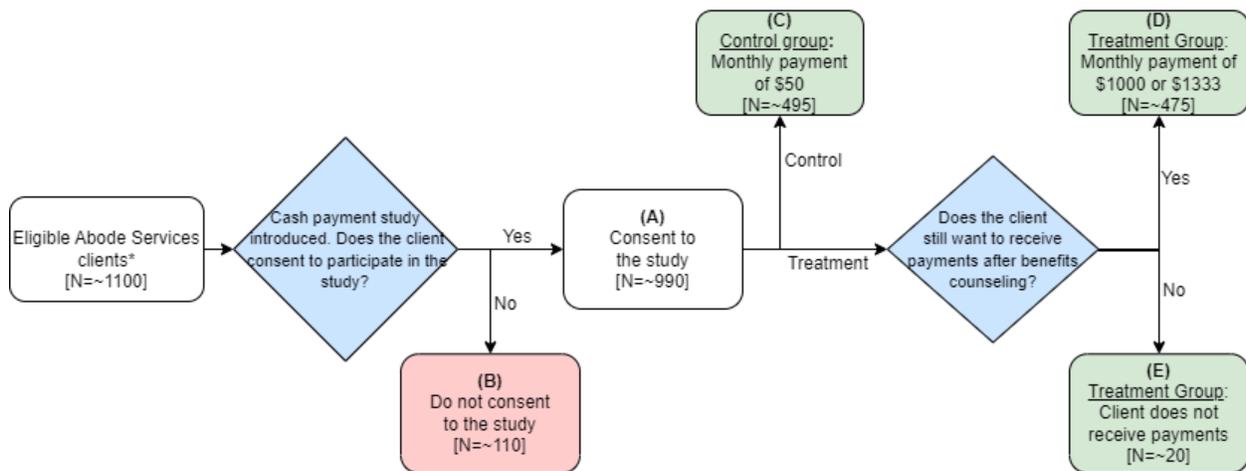
Eligibility

Any head of household exiting Abode Services' RRH programs during the study period who is over 18 and is not already enrolled in another cash transfer pilot program will be eligible.

Enrollment

Beginning in mid 2023, clients who exit Abode Services' RRH programs will have the option to participate in a cash transfer program. Figure 1 lays out the enrollment process. Because clients meet regularly with their case manager while receiving RRH rent subsidies, we will integrate study enrollment into the last case manager meeting prior to exit from RRH. We implement study enrollment at the end of the period during which clients receive benefits because we do not want the receipt of unconditional transfers to affect the duration of RRH benefits. During the last meeting, the case managers will ask the client if they are interested in participating in a study that provides cash payments of \$50 or more for one year. If the client indicates interest, the case manager will refer them to the Program and Enrollment Coordinator with whom they will meet immediately following their meeting with the case manager.

Figure 1: Enrollment Process



* Client must be exiting RRH in the next month, not currently enrolled in another cash transfer study, and willing to participate in a cash transfer program

The Program and Enrollment Coordinator will introduce the unconditional cash transfer program and describe how the value of the payments will be determined by a lottery. Potential participants will be asked to consent to receive cash payments of an amount determined by a lottery. Those who consent to participate in the cash payment program will be asked to be part of the study and allow the research team access to their information through a variety of administrative data sources. Individuals can still receive payments even if they do not want to be part of the study and share data (Figure 1, Box B); they will be randomized into the same cash transfer options as those in the study, but will not be part of the study. This avoids concerns about the offer of payments being viewed as coercion to participate in the study. Those who consent to the study will complete a short intake survey. Our aim is to enroll 990 households (Figure 1, Box A). We anticipate enrolling individuals until 1,100 eligible clients have exited RRH in order to enroll 990 households, assuming a 90 percent consent rate for the study. Given that approximately 500-600 clients exit Abode's RRH program each year, we expect this enrollment process will take approximately two years. The 90 percent consent rate is based on the actual rate from a study with a similar structure (Bartik et al., 2020). Those participating in the lottery will have an equal chance of being assigned to either the

treatment or control group. We will stratify the randomization by family type given that families in the treatment group will receive larger amounts.

At this final case management meeting prior to RRH exit, the Program and Enrollment Coordinator will inform the participant of their treatment status, their monthly payment amounts (either the full payments, as laid out in Table 1, if in the treatment group, or \$50 per month for one year if in the control group), and the potential impact of the cash transfers on eligibility for federal, state, and local means-tested programs for which a waiver is not available.¹ Participants will be informed that they can opt out of receipt of cash payments or the study at any time. Finally, the participant will receive a preloaded debit card with the first month's payment, and the Program and Enrollment Coordinator will inform the participant that subsequent monthly payments will be automatically added to their debit card.

Intervention

The intervention will provide monthly payments for one year ranging from \$800 to \$2,000, with families receiving the higher amount. We will also offer higher payments at the beginning of the year to provide greater support to individuals at the beginning of their transition away from RRH. These payments are roughly comparable to the average payment made by Abode's RRH programs (\$1,400) and will on average cover one-half to two-thirds of monthly rent (\$2,100). They are also comparable to other recently launched large-scale cash transfer studies (e.g., Bartik et al., 2020). Motivated by feedback from prior Abode RRH clients, the payments will be larger in the initial months than in later months to help with bigger expenses such as car repairs. Table 1 shows the payment schedule.

Table 1: Cash Transfer Payment Schedule

	Months 1-4	Months 5-12
Singles / Adults Only	\$1,650	\$800
Families with Dependents	\$2,000	\$1,000

Research Questions

We will study the effect of unconditional cash transfers for those exiting RRH on key outcomes. Our primary research question is: Do unconditional cash transfers reduce returns to homelessness for those exiting RRH? In addition, we will examine two related research questions: 1) Do unconditional cash transfers increase housing stability (as measured by number of moves) for those exiting RRH, and 2) Do unconditional cash transfers improve financial well-being (as measured by indebtedness and other indicators from credit report data).

Power Calculations

¹For many means-tested transfer programs, waivers are available so that the cash payments do not affect the value of their benefits. However, waivers are not typically possible for some programs such as Supplemental Security Income (SSI). Participants will be advised on how the cash transfers will affect eligibility for these programs.

We will be powered to detect a 6.5 percentage point (23 percent) decrease in the probability of becoming homeless 12 months after exit from RRH, assuming an untreated mean of 28 percent. Given the nature of the intervention, we expect take-up to be very high. One group which may not want to participate in the study is those receiving SSI benefits, because the study transfer payments may compromise their SSI eligibility. Since about 4 percent of Abode's RRH clients receive SSI benefits, we conservatively assume that all SSI recipients in the treatment group will decline to take up the cash transfers (Figure 1 Box E), resulting in a 96 percent take-up rate.

III. Key Data Sources

The following section summarizes the planned primary data sources for this project. Notably, securing access to these data sources is complete, except for Homeless Management Information System (HMIS), which Abode will contract with when the primary data has been generated. Given this, HMIS outcomes may ultimately be excluded, and we'll exclusively rely on Infutor to measure housing stability, if Abode is unable to secure a data use agreement; a scenario we view as very unlikely. .

A. Homeless Management Information System

We plan to measure the impact of cash transfer on participants' homelessness status. The Homeless Management Information System (HMIS) collects client-level data from all publicly contracted homeless service providers in the Bay Area. HMIS allows us to observe date-specific service outcomes for both treatment and control group participants, like entry into emergency shelters or transitional housing. HMIS ID, name, SSN, date of birth, and other characteristics will be used to link records together. Abode Services will leverage their existing relationships with county-level HMIS administrators to access this data.

B. Infutor Data Solutions

We plan to use data from Infutor to measure the effect of cash transfers on housing stability. Infutor contains data on address histories of individuals in the United States allowing us to quantify housing stability via address changes. LEO currently holds the Infutor data and regularly receives data updates.

C. Experian

We plan to measure the impact of cash transfers on participants' credit score and use of credit using data from Experian. LEO currently holds the Experian data and regularly receives data updates which we will use to link records in this study with Experian's credit data.

IV. Hypotheses: Analysis by Outcome Domains

A. Housing Stability

1. Primary Measure: Any use of homelessness services as recorded in HMIS
 - a) Measuring homelessness as implied by the use of homelessness services
 - (1) Dummy for whether of not participant received any HMIS homelessness services
 - (2) Constructed using HMIS data
 - b) Hypothesis: the treatment group will be less likely to use HMIS homelessness services.
2. Alternative Measures:
 - a) HMIS: use of emergency shelter and/or street outreach
 - b) Infutor: address moves, former address ending, new address beginning, neighborhood characteristics of most recent address

B. Financial Wellbeing

1. Primary Measure: Change in Credit Score
 - a) Measuring change in credit score
 - (1) Dummy for whether participant's credit score increased since random assignment
 - (2) Constructed using Experian data
 - b) Hypothesis: the treatment group will have increased creditworthiness compared to the control group.
2. Alternative Measures:
 - a) Experian: credit score, credit score decrease, account balance, delinquent accounts, collections, debt, credit inquiries

V. Subgroup Analysis

The research team is interested in determining whether the intervention is more effective for certain subgroups of those who exit RRH. The following are areas of interest for exploratory analysis of subgroups:

A. Family Status

1. Family = one or more dependents; single = no dependents

B. Gender

1. Female = Self-identified as female; Male = Self-identified as male

C. Race/Ethnicity

1. Hispanic = Self-identified as Hispanic or Latino; Other = everyone else
2. White, non-Hispanic = Self-identified as White and Non-Hispanic or Non-Latino; Other = everyone else

VI. Data Analysis

A. Estimates

We will estimate intent-to-treat (ITT) treatment effects by OLS using the following regression:

$$Y_i = \alpha_0 + T_i\beta_0 + X_i\gamma_0 + \epsilon_i$$

Y_i is the outcome. T_i is an intent-to-treat dummy indicating the random assignment of person i . In the case of non-compliance, T_i takes on the value of the original random assignment. The vector X_i includes a set of person-level characteristics collected at baseline, and ϵ_i is an error term. The coefficient on the treatment dummy β_0 will give us the difference in means between the treatment and comparison groups, the estimated impact of the program. The full estimation sample will include about 445 individuals in the treatment group and 445 individuals in the control group.

B. Covariates

We plan to include the following covariates in our regressions:

1. Value of dependent variable at baseline, if applicable
2. Age and age-squared at time of enrollment
3. Gender (1 = female, 0 otherwise)
4. Indicator for family status (1 = has dependents)
5. Set of mutually exclusive variables for race/ethnicity

C. Standard Errors

We will use heteroskedasticity-robust standard errors, clustered at by stratum (i.e. by family status). We also intend to consider complementary alternatives such as adjusting clustered standard errors for finite-sample bias, bootstrapping procedures, and randomization inference.

D. Multiple Hypothesis Testing

The research team has limited their primary outcome to an indicator for homelessness. The other outcomes are considered exploratory. Therefore, we will report classic p-values both for these outcomes and for our exploratory outcomes.

VII. References

- Bartik, A., Broockman, D., Miller, S., Rhodes, E., & Vivalta, E. (2020, January). OpenResearch Basic Income Project Proposal.
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