

Pre-Analysis Plan:

Do homelessness prevention programs prevent homelessness?

Evidence from a randomized controlled trial

Principal Investigators:
David Phillips and James Sullivan
September 20, 2021

Context of this plan

This project was originally designed as an observational study that would compare outcomes from those who had access to rental assistance to those who did not. This design process began in early 2017. Because the program had funds to support all applicants who met the eligibility criteria for the program, random assignment was not feasible. During the development phase of the research design for this project, demand for services increased suddenly. The service provider, Destination:Home, concluded that there was significant excess demand for their program and began rationing services on a first-come, first-served basis in mid-2019. Given this context, they were interested in implementing a lottery to determine which eligible applicants would receive assistance. The transition from a quasi-experimental study to implementation of the lottery occurred rapidly. Although the principal investigators did not draft a formal pre-analysis plan prior to the start of the lotteries, they did submit an IRB protocol. This protocol was approved in June of 2019, prior to the launch of the lotteries. The content of this IRB protocol serves as a proxy for a pre-analysis plan for this project. Research papers that describe results from this project will note if/when analyses differ from those specified in this protocol. The relevant sections of the IRB protocol are appended to this document. In addition, below we paste, verbatim, the key parts of the text from the original approved protocol that describe the plan for this project.

Excerpts from the IRB Protocol

Study design

In the status quo without the study, clients visit participating non-profit service providers seeking help to prevent imminent homelessness. Clients meet with a case manager and participate in an eligibility screening which the county is already implementing. Clients scoring above 13 would be automatically eligible for financial assistance. Clients scoring below 8 will not be considered eligible

for financial assistance. For clients scoring 8-13 there is a monthly quota of funds available. Clients scoring in that range would get funds on a first-come first-served basis until funds are exhausted for the month.

Participants for the study will be recruited from this process. With the study, the only change in services is that clients with an eligibility score 8-13 will be entered into a lottery rather than first-come-first-served. The case manager will briefly explain the purpose of the study and the way the lottery works to randomly determine whether or not someone can get access to emergency financial assistance. Participants will be entered into a lottery through a web-based form design on SurveyCTO. The form will be programmed to consider pre-specified funding quotas for each participating agency that match the quotas that would have been implemented for first-come, first-served. When the agency puts in the information for the last person in the quota, the form will tell them not only the result for that person but also the fact that this is the last person for the month. After that point, people scoring 8-13 are turned away for the rest of the month at that agency, which is identical to the status quo.

All clients already sign a release of information; the study would slightly modify that form to acknowledge the introduction of the lottery. Following the lottery, study participants will not be contacted again in the context of the research study. We will rely on administrative records for outcome measures. The research team will only receive de-identified data from an existing administrative data source. The Homeless Management Information System collects client-level data from all publicly contracted homeless service providers in Santa Clara County. From this information system, we can observe date-specific service records to track outcomes for both treatment and control group participants. Among other variables, HMIS data will allow us to observe vulnerability assessment scores and entry into emergency shelters or transitional housing. We have a signed service agreement with Santa Clara County specifying the outcomes we will track for study participants.

The only new elements introduced by the study are (a.) analysis of existing de-identified data and (b.) replacing existing first-come- first-served rationing with a lottery. All other elements of service provision, including use of a risk scoring tool and rationing of homelessness prevention funds, will exist regardless of the evaluation.

Those clients assigned to the control group and any who do not wish to participate in the study but are otherwise eligible for other social services outside of homelessness prevention funding, will be provided usual care. Study participants not offered homelessness prevention services, are

given information about other ways to find housing in Santa Clara County. They have about the same chances of securing housing as other people who are at risk of homelessness in Santa Clara County and who are not in the study. If a client decides not to join the study, this decision will not affect the client's chances of getting housing in other ways, but the client will not have the chance to be offered homelessness prevention services through Destination:Home.

Methods

For continuous outcomes (e.g. days spent in shelter), we will estimate treatment effects by OLS using the following regression: $Y_i = \alpha_0 + T_i \beta_0 + X_i \gamma_0 + \epsilon_i$ where 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. For dichotomous outcomes (e.g. entered emergency shelter), we will use a linear probability model: $Y_i = \alpha_1 + T_i \beta_1 + X_i \gamma_1 + \epsilon_i$ where Y_i is the dummy variable.

Sample

In order to be eligible for Destination:Home homelessness prevention services, clients must enter one of the affiliated agencies and request housing assistance. In order to be eligible for the study, however, clients must be over the age of 18. Participants will complete the Standardized Risk of Homelessness Tool, based on HUD homelessness prevention tool. Participants' responses contribute to a point total. Participants with point totals 8 through 13 will be eligible for the lottery to access homelessness prevention funding. Participants with point totals over 13 will be automatically eligible for funding, and participants with point totals under 8 will not be eligible for funding. Households that score over 14, indicating high risk of homelessness, will automatically be offered funding. They will not be included in the lottery or that portion of the evaluation. Households that score under 8 will not be eligible for funding and will not be included in the lottery. Households headed by a client who is under the age of 18 will not be included in the study; they will receive standard services through Destination:Home. Clients who are de-identified in HMIS (e.g. domestic violence survivors) will also be excluded due to lack of follow-up data.

Outcomes

We will rely on administrative records for outcome measures. The research team will only receive de-identified data from an existing administrative data source. The Homeless Management Information System collects client-level data from all publicly contracted homeless service providers in Santa Clara County. From this information system, we can observe date-specific service records to track outcomes for both treatment and control group participants. Among other variables, HMIS data will allow us to observe vulnerability assessment scores and entry into emergency shelters or transitional housing. We have a signed service agreement with Santa Clara County specifying the outcomes we will track for study participants.

Subgroups

Specific analyses by subgroup were not specified in the IRB protocol.