Request for Proposals:

Low-Cost Randomized Controlled Trials to Drive Effective Social Spending

September 2016
Low-cost randomized controlled trials (RCTs) are a powerful new tool for building scientific evidence about “what works” in social spending. Well-conducted RCTs are widely regarded as the most credible method of evaluating whether a social program is effective, but are often assumed to be inherently too expensive and burdensome for practical use in most areas. Recently, however, researchers have shown that, in many instances, high-quality RCTs can be conducted at low cost and minimal burden, addressing a key obstacle to their widespread use. The low cost is achieved by:

- **Embedding random assignment in initiatives that are being implemented anyway as part of usual program operations.** RCTs can be embedded in many new or ongoing programs, for example, by using a lottery process – *i.e.*, random assignment – to determine who among those eligible will be offered program services (since available funds are often insufficient to serve everyone who qualifies).

- **Measuring key study outcomes with administrative data that are already collected for other purposes** (*e.g.*, student test scores on state exams, criminal arrest records, and health care expenditures), rather than engaging in original – and often expensive – data collection through interviews or testing.

Such studies make it possible now, as never before, for policy officials to use scientific evidence about what works to increase government effectiveness (see our short concept paper on low-cost RCTs for further discussion).

In 2013, the Laura and John Arnold Foundation (LJAF), in partnership with the Annie E. Casey Foundation, funded the launch of a low-cost RCT competition. The competition was administered by the nonprofit, nonpartisan Coalition for Evidence-Based Policy. In spring 2015, LJAF assumed the administration of the competition after the Coalition wound down its operations as an independent organization and the group’s leadership joined LJAF.

Last fall, LJAF announced a significant expansion of its investment in low-cost RCTs, which is reflected in the current Request for Proposals (RFP). Specifically:

- **We increased the targeted award amount from $100,000 (in the early RFPs for the competition) to $150,000**, and will allow awards of up to $300,000 if the additional cost can be justified.

- **LJAF plans to fund all proposals that receive a strong rating from the proposal review panel**, based on the criteria in the RFP.

- **We plan to issue more than one RFP each year**, to enable interested parties to apply for funding as opportunities arise.

Prior rounds of the competition succeeded in funding large RCTs with strong designs, carried out by highly-capable researchers, and measuring outcomes of self-evident policy importance. The studies awarded in the first two competition cycles (2014 and 2015) have all met their initial benchmarks – recruitment of large samples, successful randomization resulting in treatment and control groups that are
highly similar in observable characteristics, and access to low-cost administrative data to measure policy-important outcomes over a sustained period of time (between two and seven years). The funded studies include, as illustrative examples:

- **A large, multi-site RCT of Bottom Line**, a program that provides one-on-one guidance to help low-income, first-generation students get into and graduate from college. This study is measuring college enrollment, persistence, and completion outcomes for a sample of about 2,400 students over a seven-year period, using administrative data from the National Student Clearinghouse. The total study cost is approximately $159,000, of which $100,000 was awarded through the competition.

- **A large RCT of Durham Connects**, a postnatal nurse home visiting program designed to improve child and mother health and well-being. The study – which seeks to replicate the positive findings from a prior RCT of Durham Connects – is using hospital administrative records to measure program impacts on families’ emergency department use and related healthcare costs through child age 24-months, for a sample of 937 families in Durham County, North Carolina. The total study cost is approximately $183,000, of which $96,000 was awarded through the competition.

- **A large, multi-site RCT of workplace health and safety inspections** conducted by the federal Occupational Safety and Health Administration (OSHA). For a sample of about 13,000 business establishments eligible for a randomized inspection, the study is testing whether being randomly chosen for inspection affects establishments’ subsequent injury rates and business outcomes (e.g., sales, business closures) over a three-to-four year period – all measured through administrative data from OSHA and other sources. The total study cost is approximately $153,000, of which $96,000 was awarded through the competition.

- **A large RCT of Multi-Tiered Systems of Supports (MTSS)**, a schoolwide reform initiative, designed to increase academic achievement and reduce behavioral problems. It is being scaled-up district-wide in Wake County, North Carolina, through a phased-in approach that will embed an RCT. Forty-four schools (the treatment group) began implementing MTSS last year, and 44 schools (the control group) will implement it two years later. The study will measure math and English test scores, behavioral suspensions, and other outcomes over the two-year period using district administrative data. The total study cost is approximately $150,000, of which $81,000 was awarded through the competition.
REQUEST FOR PROPOSALS

I. Overview:

A. This RFP invites grant applications to conduct low-cost RCTs in any area of domestic social policy. The targeted award amount is $150,000, but we will potentially award up to $300,000 if the additional cost can be justified, as described below.

B. We plan to fund all proposals that receive a strong rating from the expert review panel, based on the criteria in this RFP. The panel will be similar in composition to that used in evidence review initiatives of the Coalition for Evidence-Based Policy.

II. Application Process and Selection Criteria:

A. The following table shows the requested application materials and timeline:

<table>
<thead>
<tr>
<th>Stage of application process</th>
<th>Date</th>
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<tbody>
<tr>
<td>All prospective applicants are asked to submit a letter of interest (maximum three pages)</td>
<td>Deadline: December 15, 2016</td>
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<tr>
<td>Applicants will be notified whether they are invited to submit a full proposal (full proposals must be invited)</td>
<td>By February 3, 2017</td>
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<tr>
<td>Invited applicants submit a full proposal (maximum six pages)</td>
<td>Deadline: March 17, 2017</td>
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<td>Applicants will be notified whether they have been selected for award</td>
<td>April 2017</td>
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<tr>
<td>Grants will be awarded</td>
<td>May-June 2017</td>
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B. Letters of interest and invited full proposals should address each of the selection criteria below, within three pages (for the letter) and six pages (for the invited full proposal). Applicants may use their own format, with single or double spacing, and an 11-point font or larger. The page limit does not include attached letters or other documents specifically requested in this RFP. Please submit all items via email to LowCostRCT@arnoldfoundation.org.

C. Selection Criteria:

For the letter of interest: While we ask applicants to address all four selection criteria below, we do not expect applicants to have finalized all aspects of the study design and partnership agreements; therefore, reviewers will focus primarily on the other two criteria – “importance” and “experienced researcher” – in determining which applicants to invite to submit a full proposal.

For the invited full proposal: Reviewers will consider whether all four criteria are satisfied.

➢ IMPORTANCE: Is the applicant proposing to evaluate an intervention –

- That is backed by highly-promising prior evidence, suggesting it could produce sizable impacts on outcomes of recognized policy importance – such as educational achievement, workforce earnings, criminal arrests, hospitalizations, child maltreatment, and government spending. For example, we specifically encourage applications seeking to replicate findings
from prior rigorous evaluations that are especially promising but not yet conclusive (e.g., due to only short-term follow-up, a single-site study design, or well-matched comparison groups but not randomization). As a threshold condition for “highly promising” evidence, applicants should show that the intervention can be or (preferably) has been successfully delivered under real-world implementation conditions.

- or -

• For which there are other compelling reasons to evaluate its effectiveness – e.g., it is, or soon will be, widely implemented with significant taxpayer investment, and its impact on its targeted outcomes is currently unknown.

Please note that, to meet this criterion, it is not sufficient to establish that the study addresses an important problem; applicants must also present compelling reasons to evaluate the specific intervention.

➢ EXPERIENCED RESEARCHER: Does the applicant’s team include at least one researcher in a key substantive role who has previously carried out a well-conducted RCT (even if not low cost)? A well-conducted RCT is characterized, for example, by low sample attrition, sufficient sample size, close adherence to random assignment, and valid outcome measures and statistical analyses. To address this criterion, applicants should submit reports from prior RCTs that the researcher has conducted (please send the full study reports as email attachments to the letter of interest – no more than two reports in all). Reviewers will rely primarily on these reports in assessing this selection criterion.

➢ STUDY DESIGN: Is the applicant’s proposed RCT design –

• Valid? In other words, does it have a sufficiently large sample (as shown through a power analysis) and other elements needed to generate credible evidence about the intervention’s impact on one or more targeted outcomes of high policy importance? We strongly encourage designs that measure such outcomes in both the short and longer term, as appropriate for the type of intervention and study, to determine whether the effects endure long enough to constitute meaningful improvement in people’s lives. Reviewers, in assessing an applicant’s proposed design, will use Key Items to Get Right When Conducting RCTs of Social Programs as a reference.

• Low cost? Such low cost may be achieved, for example, by (a) embedding random assignment in an intervention that government or philanthropic organizations are already funding or planning to fund; and/or (b) measuring key outcomes using administrative data that are already collected for other purposes and are of reasonable quality.

Applicants, as part of their discussion of this criterion, should specify the study’s primary outcome(s) of interest, how they will measure the outcome(s) and over what length of time, and what analyses they plan to conduct (e.g., any subgroups to be examined, regression methods to be used).

➢ PARTNERS: Does the applicant’s team include all parties needed to conduct the RCT? Examples of necessary parties include: researcher(s), an agency delivering the intervention, and an agency housing the administrative data. To verify the existence of such partnership, the reviewers will look for attached letters or other communication showing, for example, that (a) a social service
agency that delivers the intervention has agreed to participate in the study, including random assignment; and (b) a data agency has agreed to provide the researcher(s) with access to the administrative data needed to measure study outcomes.

D. Other items to include in the letter of interest and invited full proposal:

1. **Applicants should specify the amount of funding requested.** Our targeted award amount is $150,000. Applicants requesting a larger award – up to the limit of $300,000 – should submit an attachment (no more than one page) to the letter of interest and full proposal that provides the reasons for the higher request.

Invited full proposals (but not letters of interest) should include a one-page project budget as an attachment. In the budget, LJAF allows for project-related overhead expenses such as salaries and benefits of administrative staff, equipment, supplies, and travel to be included in direct costs; however, LJAF will only provide funding for indirect costs, up to a 10% limit, if extenuating circumstances exist and have been approved by LJAF prior to submission of an invited full proposal. (Please contact David Anderson, at the email address or phone number shown below, for additional information.)

If additional funding from other sources is needed to carry out the study, we request that the applicant’s budget show (a) the total study cost, and (b) the portion of that cost to be covered by LJAF; and include an attached letter or other communication showing that the additional funding will be in place prior to LJAF’s grant award. In such cases, the total study cost – including the additional funding – should still meet the spirit of a “low-cost RCT.”

2. **Applicants should specify the proposed recipient of the grant award, which we generally expect to be a tax-exempt organization** (e.g., nonprofit organization, university, or governmental unit). If an organization is not tax-exempt and wishes to apply, please contact David Anderson (see contact information below).

3. **Applicants should briefly address how their study meets recognized ethical standards for research with human subjects.**

III. **What to Expect in the Grant Agreement:** We will ask awardees, as a condition of their award, to –

- **Pre-register the study on the Open Science Framework (OSF)** [website](#) and, prior to commencement of the study, upload a copy of the research and analysis plan described in their proposal.

- **Provide us with brief phone or email updates on the study’s progress on a periodic basis, and before making any key decisions that could materially affect the study’s design or implementation.**

- **Submit concise reports on the impact findings at appropriate intervals.** These reports should make it easy for readers to see the study’s main results and gauge their credibility (e.g., by showing the similarity of the treatment and control groups in pre-program characteristics, the amount of sample attrition, and the statistical significance of the impact findings).

- and -
• Make their datasets and related materials (e.g., survey instruments, code used to clean and analyze datasets) publicly available on the OSF site, unless doing so would materially hinder study implementation or raise its cost. We ask applicants to do this within one year of the last data collection, and only to the extent allowed under any confidentiality/privacy protections.

[Note: The above list previews the main items in the streamlined grant agreements that LJAF uses for low-cost RCTs, but is not an exhaustive list of the conditions of the award.]

IV. Questions? Please contact David Anderson, Director of Evidence-Based Policy (danderson@arnoldfoundation.org, 202-239-1248).