



APPLICATION:

Seed Funding for HARC Pilot Studies

The Home Visiting Applied Research Collaborative (HARC) aims to advance the use of innovative methods in home visiting and translate research findings into policy and practice.

HARC announces the availability of seed funding for short-term pilot studies focused on precision home visiting. This document provides an overview of HARC, defines key principles of precision home visiting, and provides guidance for applications for funding.

HARC

HARC was established in 2012 with core support via a cooperative agreement with the Health Resources and Services Administration, Maternal and Child Health Bureau (HRSA, MCHB) as part of the Maternal, Infant and Early Childhood Home Visiting program (MIECHV). HARC was awarded a new five-year cooperative agreement from MCHB for July 2017 through June 2022. Johns Hopkins University serves as HARC's organizational home and fiscal agent. Johns Hopkins partners with other academic institutions, research firms, and home visiting experts to design and build HARC's infrastructure and carry out its vision.

HARC is unique among the HRSA-funded networks in that it is a research and development platform focused on **applying innovative research methods to advance precision home visiting practice**.¹ It is a prototype for building similar platforms across other aspects of maternal and child health. HARC is also home to a practice-based research network (PBRN), which includes approximately 300 home visiting program sites, 150 researchers, and 75 local networks that additionally oversee hundreds of home visiting program sites.

PRECISION AND INNOVATION

Research shows that many families fail to benefit from our existing home visiting models. Traditional home visiting studies examine the impact of programs on the average participant, producing effect sizes that are small to moderate. These studies do not tell us what works best for whom and how to get the strongest effect for unique groups of families. Thus, while we need research to guide the scale-up of existing models with the goal of improving population health, we also need research to refine existing models to better tailor services for home visiting participants. We can do this by identifying and scaling up innovative service strategies *within* home visiting to strengthen and broaden its effectiveness among families who fail to engage in current models or who do engage but fail to benefit. To do this, we need new ways of designing and testing research questions, and new study designs and analytic techniques to support precision home visiting research.

HARC emphasizes partnering with stakeholders in all phases of the design, testing, and integration of efficient strategies into current policy and practice. This includes engaging states

¹ See <http://www.hvresearch.org/resources/>



and national models, as well as local programs and families, in designing, carrying out and using research to develop and scale up innovations to promote precision home visiting. This approach aims to promote and improve family functioning, parenting, and child development and well-being. The HARC PBRN, for example, depends on the engagement and interest of its program members for the successful conduct of any study.

Precision home visiting research seeks to determine the elements of home visiting that work best for particular types of families in particular contexts. It focuses on the active ingredients of home visiting services rather than on complex models as a whole, and on analyzing outcomes for meaningful subgroups of children and families.

Precision home visiting practice means individualizing the content and style of home visiting to each family's unique circumstances in order to achieve meaningful outcomes efficiently, and to do this in ways that are mindful of the larger context. It is the opportunity to differentiate home visiting practices provided under certain conditions or for certain groups of participants from a more traditional, uniform approach applied to all participants.

Relevant conditions or groups are not defined only by traditional risk and protective or demographic factors, but by more nuanced characteristics, such as a family's "readiness" for home visiting – whether a family wants what home visiting might offer. This "wanting" might be further differentiated – some families are unaware of certain needs while others might be aware but not ready to take action for change. Other examples of relevant characteristics include the parents' comfort with forming a trusting relationship with a home visitor, or their cognitive capacity; these characteristics have implications for precision in different areas of practice, such as the home visitor's communication style.

HARC will focus on building the field's capacity to conduct innovative research to examine use and effectiveness of precision-based approaches. There are four central tenants to this approach:

- **Focus on active ingredients, rather than complex models:** Most home visiting models combine many ingredients to achieve diverse outcomes. These ingredients might or might not have a strong evidence base. HARC focuses on ingredients that, if found effective, can be adopted across relevant models to hasten the scale up of what works.
- **Broad-based partnerships:** Each stakeholder group brings a unique and vital perspective to home visiting. HARC brings together researchers, policymakers, and other stakeholders, such front-line staff, families, and community members, to partner in defining and testing specific ingredients to strengthen and broaden impacts.
- **Explicit definitions and measurement:** Understanding what specific ingredients work, for whom, requires explicit definition and measurement of ingredients, outcomes, and possible moderators of impacts. HARC's approach embodies specificity in definition and measurement.
- **Efficiency in testing ingredients:** Many new research designs, such as adaptive trials and rapid cycle techniques, can accelerate our learning of what works, for whom. HARC R&D projects use these designs.



It is important to note our emphasis on research *and development*. HARC prioritizes conducting research for the purpose of rapid translation to policy and practice. As part of this initiative, HARC is allocating funds for pilot and preliminary studies. This seed support for pilot projects will provide critical preliminary data for study design. Receipt of this support requires a commitment on the part of the investigator to use the results of the pilot work as preliminary evidence for expanded² study of the proposed topic. It also requires that recipients work closely with designated members of HARC’s management team to ensure the proposed study aligns with the tenets of precision HV methods. Finally, receipt of this support comes with an expectation that the investigator will showcase results in appropriate venues, including HARC meetings, disseminated research briefs or white papers, peer-reviewed journals, and other relevant professional and academic meetings.

CURRENT REQUEST

Use the guidance below to complete an application for consideration of seed funding for pilot studies focused on precision home visiting and innovative practices. The maximum amount of funding is \$25,000 (including indirect costs). Applications will be accepted on a rolling basis. We expect to fund up to three proposals.

The proposed research should be completed within a maximum 15-month timeframe (shorter if possible), as one component of effective applied research is the rapid translation to policy and practice. There are two steps in the funding process:

1. Letter of Interest

Please prepare letter of no more than two pages. In this LOI, please include the following information:

- a. Succinct statement of your research idea;
- b. Brief rationale for why this topic is innovative;
- c. Explication of how the research idea fits into the concept of precision home visiting;
- d. Brief statement of background/experience of primary research investigator/team.
- e. Contact information for follow-up

Based on the information provided, if your research idea shows promise based on HARC’s mission, we will set up a consultation call to discuss your idea with you and gather more information. If needed, we will review possible modifications in order to align more fully with our focus of applying innovative research methods to advance precision home visiting practice.

Letters of intent should be emailed to harc@jhu.edu.

2. Application

After review and consultation, prospective applicants may be asked to submit a full proposal. If you are invited to submit, the following components are required for the application:

² By expanded we mean not just in terms of budget, but in scope, ambition, and potential to transform the field



A. COVER PAGE

1) Applicant Information

Name of Applicant (Principal Investigator):

Organization/Affiliation:

Mailing Address:

Phone Number:

Email Address:

2) Project Information

Name of Pilot Project:

Requested Amount:

Length of Project:

B. PRIMARY APPLICATION NARRATIVE

The main body of the application must not exceed five pages³ and include the following subsections:

1) Specific Aims	Concisely state the goals of the proposed research and the expected outcome(s), including the impact that the results of the proposed research will have on home visiting and the early childhood systems of care. List specific objectives of the proposed study.
2) Significance	This section expands on why the research is important and why it needs to be conducted. The potentially transformative nature of the findings should be described. Explain the importance of the problem or critical barrier to progress that the proposed project addresses. Describe the scientific premise for the proposed project, including consideration of the strengths and weaknesses of published research or preliminary data crucial to the support of your application. Explain how the proposed project will prepare the investigator for designing and proposing a precision home visiting research study.

³ Single spaced with one-inch margins and 11 point font



<p>3) Innovation</p>	<p>Explain how the application challenges and seeks to shift current research or clinical practice paradigms. Describe any novel theoretical concepts, approaches or methodologies, instrumentation or interventions to be developed or used, and any advantage over existing methodologies, instrumentation, or interventions. This may include the use of creative cross-disciplinary or cross-model collaborations or application of new conceptualizations and new perspectives to address an existing problem.</p> <p>Describe how this application lends itself to precision home visiting practice— its focus on active ingredients⁴ or addressing questions about what works, for whom, and in what contexts to achieve specific outcomes.</p> <p>Briefly describe your anticipated future research to which the proposed study will lead. How will you build on results of this work?</p>
<p>4) Approach</p>	<p>Describe the overall strategy, methodology, and analyses to be used to accomplish the specific aims of the project. Include how the data will be collected, analyzed, and interpreted. This will vary with the type of study but include a description of the research design, information about the target population, inclusion/exclusion criteria for participants and sample size justification, proposed study sites, the data collection and measurement plan, description of any treatments or interventions used, and the analysis plan. A power analysis for pilot or preliminary studies is optional.</p> <p>If the project is in the initial stages of development, describe strategies to establish feasibility of proposed intervention activities and study design.</p> <p>Describe efforts to engage practitioners and/or families as collaborators in the research process beyond serving as sample participants. Note whether and how you plan to involve HARC PBRN⁵ members in the study sample and/or the research design</p>

⁴ Active ingredients are the program elements responsible for driving changes in parents’ knowledge, attitudes, and behaviors. See HARC website for more details: www.hvresearch.org

⁵ HARC has built a membership of over 300 local home visiting programs, 150 home visiting researchers, and 75 local networks representing over 500 additional programs. Local programs are from 46 states, one territory, and the District of Columbia and, as a group, implement twelve of the evidence-based models as well as many promising models. Member sites and researchers can take part in relevant studies and suggest studies to be carried out within HARC.



C. ADDITIONAL INFORMATION

In addition, please include the following in attachments (not counted against page limits)

1. List of cited references
2. Bio sketch for the principal investigator(s)⁶
3. Other key personnel (described separately in brief paragraphs)
4. Budget and justification (see below)
5. Timeline of proposed activities
6. Describe plans for protection of human subjects from research risks⁷

PROPOSAL REVIEW

The proposals will be reviewed on the following criteria: impact, significance, approach, innovation, and investigator(s). The following is a summary of questions that will be considered in evaluating each portion of the proposal:

- 1) **Impact.** What is the potential of the proposed study to have an important home visiting impact or to lead to future research that will have an impact?
- 2) **Significance.** How does the proposed study extend or expand existing science or practice? Does it address important elements of precision home visiting?
- 3) **Approach.** How sound are the proposed research design and methods? Are the proposed methods feasible and is their selection well justified? Does the study involve HARC program sites? Does it engage in collaborative activities with programs and/or families?
- 4) **Innovation.** Does the proposal appropriately use newer, novel, or innovative methods? Does the proposal combine disciplinary expertise in new ways?
- 5) **Investigators.** How well do the expertise, experience and allocated effort of the investigative team match the needs of the proposed study?
- 6) **Human Subjects.** Are human subjects adequately protected? Are women, minorities and children appropriately included or their exclusion appropriately justified? This criterion will not be scored, but rated as adequate or inadequate.

Review of proposals will be primarily guided by the desire to fund studies that advance the field, have a high potential to lead to further research and larger studies, and are consistent with HARC priorities.

⁶ We encourage you to use the NIH biosketch format. See <https://grants.nih.gov/grants/forms/biosketch.htm>

⁷ Include brief descriptions of risk and procedures to lower risk, confidentiality, investigator training in human subjects research ethics, plans to handle acute subject needs (e.g., child abuse reporting) as necessary, and IRB approval plan.



Budget & Justification

Use the following categories for your budget and justification.

<u>Personnel</u> (Percent effort, salary and fringe)	
Total Personnel	\$
<u>Consultant and Contract</u>	
Consultant (rate per day, number of days, and additional costs)	\$
Contract Other involved institutions and total costs requested for each	\$
Total Contract	\$
<u>Equipment</u>	
Total Equipment	\$
<u>Supplies</u>	
Total Supplies	\$
<u>Travel</u>	
Total Travel	\$
<u>Training/Participant Support Costs</u>	
Total Training	\$
<u>Other expenses</u>	
Publication costs	\$
Computer Services	\$
Phone	\$
Printing/copying	\$
Mail	\$
Human Subject Payments	\$
Honoraria	\$
Other	\$
Total Other Costs	\$
<u>Facilities and Administration</u>	
Total F&A Costs	\$
Total Expenses	\$

Additional Sources of Funding

If applicable, note other sources of funding directly related to the proposed project and the amount funded from these sources.