

PROMISE NEIGHBORHOODS INSTITUTE
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Evidence-Based Practice: A Primer for Promise Neighborhoods

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Why is Evidence-Based Practice Important?

In policy, funding, and programmatic circles there is a lot of talk about evidence-based practice (EBP). The idea is to invest resources and energy in programs, services, and policies that have empirical evidence demonstrating they work. Increasingly, funders are encouraging grantees to use evidence-based approaches. The Promise Neighborhoods initiative exemplifies this shift.

In describing what a planning grant applicant must include in a proposal to develop a continuum of cradle-to-college solutions, the Notice Inviting Applications (NIA) makes several references to the evidence base. Applicants must:

- *Propose solutions based on the best available evidence including, where available, strong or moderate evidence; and*
- *Describe the evidence supporting each proposed solution.*

The NIA goes on to elaborate:

Moderate evidence means evidence from previous studies with designs that can support causal conclusions (i.e., studies with high internal validity) but have limited generalizability (i.e., moderate external validity) or from studies with high external validity but moderate internal validity.

Strong evidence means evidence from studies with designs that can support causal conclusions (i.e., studies with high internal validity), and studies that, in total, include enough of the range of participants

and settings to support scaling up to the state, regional, or national level (i.e., studies with high external validity).

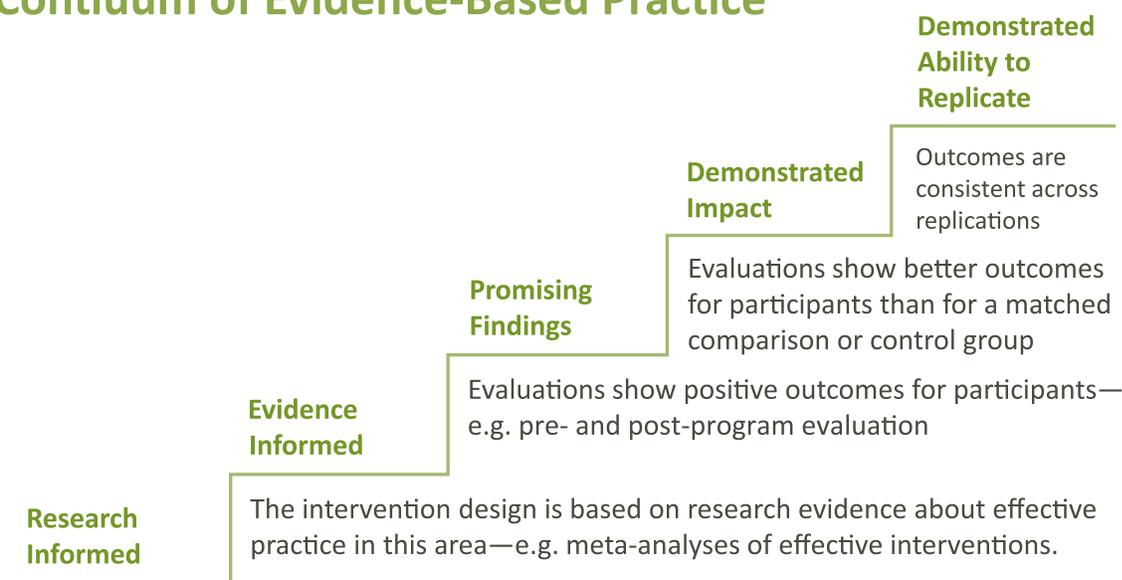
As this makes clear, the evidence for program and services will provide important grounding for Promise Neighborhoods communities. At the same time, they must ask hard questions to make sure that an EBP fits, can be implemented effectively, and can reach the level of scale that is central to the Promise Neighborhoods approach.

What Kind of Evidence Makes a Program “Evidence-Based”?

Definitions of “evidence-based” vary. At the most rigorous end of the continuum is a focus on programs, policies, and practices shown to be effective through multiple randomized controlled studies. Unfortunately few programs have been evaluated with such rigor — for several reasons. The studies are difficult to design and expensive to conduct. Organizations generally find it hard to ethically deny services to needy participants by steering them into a control group for the sake of research. Finally, many effective programs focus more on providing services than on adhering to EBP principles to evaluate their efforts.

In response to these challenges, many organizations are moving toward using a continuum, or stair-step, model. This categorizes the depth of evidence behind a specific intervention. Here is a model based on a synthesis of evidence-based continuums used in the human services field¹:

Contiuum of Evidence-Based Practice



A strong logic model ties the proposed intervention to what research tells us about how to impact child and family outcomes.

¹ A companion document has been created which lists and provides linkages to many of the existing evidence-based clearinghouses in the field—many of which use this type of a continuum model.

In general, the NIA definitions of moderate and strong evidence focus on the last two levels of the stair step. Studies that can support causal conclusions generally require a control group so researchers can compare outcomes between a group that received an intervention and a similar group that did not. Any benefits documented in the intervention group thus may be attributable to the program. Studies that demonstrate external validity have to be conducted in enough settings to show that the intervention is likely to produce the same results in different communities or contexts.

Is An Evidence-Based Program Appropriate for Your Community?

The current enthusiasm for evidence-based practice poses some risk: Communities and planners may come to value the evidence behind a particular intervention over everything else they know about that approach. This may lead organizations to choose programs that have been tested over programs that might be more appropriate for the community but that have never been fully evaluated. While the evidence for a program is important to consider, organizations must make sure that the program is a good fit for their population and that they have the ability to replicate it effectively. Organizations also need to make sure they can sustain the program and bring it to scale.

Fit and Adaptability

Fit is about how well an EBP (or any program or service) meets the needs of your community. Ideally, determining the fit is a data-driven process based on a thorough understanding of community demographics and your target populations. For which populations was this evidence-based intervention designed? How closely do those populations match the groups you want to reach? Important elements to consider are race, ethnicity, language, income, and personal characteristics. (For example, was this designed for single mothers while you are targeting grandparents raising their grandchildren?) Are key characteristics of your community mirrored in the population the program was designed for? For example, if your community has high mobility, you need to know whether the intervention is designed to address that issue.

You should not expect an exact match between your community and the original intervention population. But you should consider these questions:

- Will the differences in target populations undermine the effectiveness of the intervention in your community? For example, if the intervention was created for a primarily English-speaking population and your target population is multi-lingual, the effectiveness might be limited.
- Can adaptations help the intervention work well with your target population? To continue with the example above, you might ask whether the materials can be translated into the languages spoken by your target population.
- Have these adaptations been tested to see if they are equally effective? While materials can be readily translated into just about any language, not all concepts translate effectively across cultures. It is important to know if others have adapted the intervention to a multi-lingual population and shown positive impacts.
- In what ways might the adaptation impact the effectiveness of the intervention? This is especially important if the adaptation has not been tested.

Almost any evidence-based intervention will need to be adapted in some ways to fit a new community. Communities must approach adaptation with caution, though, and try to limit it to small changes that do

not fundamentally alter the approach, the resources, or the population being targeted. In many cases, the developer of the intervention can provide important information on which adaptations are likely to be successful and which ones might compromise your efforts. Some organizations do not sanction most adaptations of their model interventions, while others are more flexible.

Fidelity and Capacity

It is important to understand what it will take to replicate the intervention “with fidelity.” This means implementing the intervention using the same key steps, resources, level of staffing, and attention to detail and quality that the original intervention used. These questions can guide you:

1. ***Are there manuals and guidelines to help you understand the key steps in implementation? Do you anticipate barriers to following the steps as described?***
2. ***Do you have the requisite staff, or do you have the capacity to train or hire staff that will have the needed knowledge, credentials, or expertise to implement the intervention? If external training is required, do you have the capacity to bring trainers from the program to your site or to send staff members to study the model?***
3. ***Do you have enough staff or the ability to limit participants so that your staff-to-participant ratio will be identical or close to that used in the intervention?***
4. ***Do you have the resources to fund all aspects of the intervention, including participant stipends or other incentives?***

The ability to implement with fidelity is crucial to the successful replication of an evidence-based practice. Too often, organizations assume that an intervention can be replicated without exploring barriers that might impact fidelity. An EBP that relies on consultants who have clinical training in early childhood mental health, for example, may be difficult to implement with fidelity in a community where there are few people with this qualification. It is important to explore the fidelity questions up front. Unless your community has the capacity to implement an intervention with fidelity or can reasonably build that capacity, the intervention is probably not appropriate.

Questions of fidelity do not end once an EBP has been chosen. Ongoing monitoring is required to ensure that the intervention remains faithful to the original model. While program drift can occur even when staff members have received training, it is a particular risk when trained employees leave and new employees do not receive the same kind of instruction. Ideally a monitoring or quality assurance system should be built into implementation. This allows your community to review the intervention regularly and quickly make adjustments when problems arise.

Scalability and Sustainability

Scalability refers to the ability of an intervention to be expanded to serve a broader audience. Sustainability refers to the ability to continue the intervention beyond the initial investment. The following questions can guide your thinking about scalability and sustainability:

1. **What is the cost of the intervention? Costly interventions can be difficult to replicate at scale or sustain in tight budget times. Are there savings accrued in the short or long term that can be used to justify the cost?**

2. **What resources are available for sustaining and scaling up the intervention?**
3. **Does the intervention draw on a limited resource? Are there creative ideas to increase limited resources over time?**
4. **What are the differential impacts of operating at scale? Some interventions might become more effective at greater scale — an anti-smoking campaign for example. Other programs might become less as they approach scale — for example, a program that tries to prevent gang involvement by targeting at-risk youth for an exclusive leadership opportunity.**
5. **Does the intervention rely on a “buzz factor?” Certain interventions are timely because they rely on a sense of excitement over something new, a coming together around a crisis, or a connection to something very topical. It is important to think carefully about how to sustain these interventions over time.**
6. **Is the intervention applicable to diverse populations? Sometimes very targeted interventions are effective in a particular sub-population that may match your target community. But these interventions may not be replicable across broader populations.**

Harlem Children’s Zone Model

Harlem Children’s Zone has had years of experience implementing, replicating, and scaling up evidence-based practices. HCZ offers three key considerations for organizations deciding whether to adopt (and adapt) an EBP:

- **Staffing.** HCZ has sometimes found it difficult to achieve the desired results when it has relied on staff members with less-advanced credentials (Associate’s Degrees instead of Bachelor’s, for example). In such instances, HCZ has adjusted its hiring as needed. HCZ has discovered that a full-time coordinator, trained in the program, can significantly contribute to its success.
- **Training.** When possible, HCZ has started small with the intention of expanding the program after staff members have developed some expertise. This requires scheduling several waves of training as the program grows and as a result of staff changes. In some instances, HCZ continues to receive instruction from the program’s trainers; in other cases, HCZ has implemented a “train-the-trainer” model to increase the pool of trained individuals.
- **Evaluation.** HCZ uses its internal evaluation capacity to support replication efforts. An evaluation plan, created in consultation with the program developers, usually includes process and outcome measurements. During the initial session, evaluation staffers — who have also received training in the program when possible — conduct observations and provide immediate feedback about implementation. In later sessions, the focus shifts to program outcomes.

² On page 5, the NIA states that the following activity should take place in the planning year: “(4)Work with public and private agencies, organizations (including philanthropic organizations), and individuals to gather and leverage resources needed to support the financial sustainability of the plan. Planning grantees must demonstrate this financial sustainability by identifying the sources and amounts of current Federal, State, and local funds, including public and private funds, that can be used for the project.”

How to Frame the Evidence For Your Proposed Programs

Across the cradle-to-college continuum you are proposing, there may not always be a program, practice, or policy that meets the NIA definition of strong to moderate evidence. More importantly, applicants must ask the questions relating to fit, fidelity, and scalability. The following issues will be important to address in your planning grant application:

1. ***Why was the particular intervention chosen? (In other words, why do you think it is likely to have impact in your community?)***
2. ***What is the evidence base?***
3. ***If your chosen intervention has weaker evidence than other models, why is it more appropriate to the needs of your community or to your continuum of solutions?***

In the end, it is likely that investment in EBP will constitute only part of the continuum of services and programs in a Promise Neighborhood. It is probably not feasible or desirable to direct all funding towards EBPs to meet needs within your community. But building on EBPs whenever possible, and implementing them with fidelity, increases the chances that that you will achieve the results you want for children and families.

Glossary

Treatment Group: Those receiving the intervention.

Control Group: A group not receiving the intervention that is similar in every other way to the treatment group.

Randomized Controlled Trial: Compares impacts for a treatment group receiving the program or service with a control group that does not receive it. Participants are assigned to treatment or control groups randomly. Creating a control group by randomly assigning participants to control or treatment conditions is generally seen as the “gold standard” that most clearly demonstrates that the treatment is causing the outcomes.

Comparison Group: Also sometimes called matched sample control groups, comparison groups are matched to be as similar to the treatment group as possible except for the fact that they do not receive the intervention. A well-designed comparison group must be demographically identical (or as close as possible) to the treatment group, have the same patterns of behavior and the same likelihood of participating in services if offered. Using a comparison group creates the possibility that there may be an initial difference between the two groups. For this reason studies that use a comparison group are viewed as less persuasive than those using randomization to create a control group.

Experimental design: Another term for a randomized control trial, this uses randomization to create a control group (receiving no intervention) and a treatment group (receiving the intervention) and then tests whether outcomes are different for the control and treatment group.

Quasi-experimental design: This doesn't use randomization but tests for differences in outcomes between a comparison group (see above) and the treatment group.

Non-experimental design: An evaluation design that has no control or comparison group.

Internal validity: A study with internal validity shows that the intervention “caused” the outcome. Randomized control trials are generally accepted as having the highest degree of internal validity. The use of a control group that is identical to the treatment group except for the fact that they did not receive the intervention helps to rule out other causes for the outcome.

External validity: Refers to the ability to generalize the results to other communities and contexts. Generally an intervention with high external validity has shown similar results over multiple trials in different communities with different profiles.

Meta-analysis: A statistical methodology for combining and analyzing the results from multiple studies. Meta-analyses are often used to look across programs of the same type to determine common effective elements.

Directory of Evidence-Based Practice Databases

Database Name	Web Address	Type of Programs Covered
Best Evidence Encyclopedia	http://www.bestevidence.org/	Educational program including math and reading programs, comprehensive school reform programs, and early childhood education programs
California Evidence-Based Clearinghouse for Child Welfare	http://www.cebc4cw.org/	Child welfare programs
CDC Prevention Strategies database	http://www.cdc.gov/prc/prevention-strategies/index.htm	Community health
Center for the Study of Violence Prevention, Blueprints for Violence Prevention	http://www.colorado.edu/cspv/blueprints/	Violence, drug, and crime prevention programs
CASEL Safe and Sound	http://www.casel.org/programs/selecting.php	Programs that support children’s social and emotional learning
Child Trends/LINKS Database	http://www.childtrends.org/Links/	Out-of-school-time programs that work to enhance children’s development
Coalition for Evidence-Based Policy	http://evidencebasedprograms.org/wordpress/	Broad range of programs from early childhood to employment and welfare
Communities that Care	http://depts.washington.edu/sdrg/DASAmee4-07.pdf http://download.ncadi.samhsa.gov/Prevline/pdfs/ctc/CTC%20Prevention%20Strategies%20Guide%20_pdf.pdf	Programs that address at least one risk or protective factor associated with substance abuse, delinquency, teen pregnancy, school drop-out, or violence
U.S. Department of Health and Human Services/ Pregnancy Prevention Research Evidence Review	http://www.hhs.gov/ophs/oah/prevention/research/programs/index.html	Teen pregnancy prevention
Penn State Prevention Research Center’s EPIS Center	http://www.episcenter.psu.edu/?q=ebp	Delinquency, violence, and substance use; promote positive youth development
Evidence for Policy and Practice Information and Co-ordinating Research Unit, Institute of Education, University of London	http://eppi.ioe.ac.uk/cms/Default.aspx?tabid=185	Includes databases on health and education

Evidence-Based Program Directory on FindYouthinfo.gov	http://findyouthinfo.gov/DefaultSearch.aspx?sc=Pr	Youth programs
Mathematica publications	http://www.mathematica-mpr.com/publications	Employment programs
National Institute of Drug Abuse, Examples of research-based drug abuse prevention programs	http://www.nida.nih.gov/Prevention/examples.html	Programs that prevent drug use for youth
National Registry of Evidence-based Programs and Practices)	http://www.nrepp.samhsa.gov/	Interventions for the prevention and treatment of mental and substance use disorders
Office of Juvenile Justice and Delinquency Prevention Model Programs Database	http://www2.dsgonline.com/mpg/Default.aspx	Comprehensive database of youth programs
Out-of-school time program evaluation and research database	http://www.hfrp.org/out-of-school-time/ost-database-bibliography/database	Out-of-school-time programs
Promising Practices Network	http://www.promisingpractices.net/programs.asp	Programs shown to have outcomes for children, including some family support and parent education programs
Partnership for Results	http://www.partnershipforresults.org/programs.html	School-based and after-school programs for children and families
Research in Practice	http://www.rip.org.uk/wwftc/wwftc.asp	Interventions for children and youth with mental health concerns
Strengthening Families	http://www.strengtheningfamilies.org	Effective family programs for preventing juvenile delinquency
Surgeon General	http://www.surgeongeneral.gov/library/youthviolence/toc.html	Prevention and early intervention with youth violence
What Works Clearinghouse	http://ies.ed.gov/ncee/wwc/	Education programs
Wisconsin Clearinghouse on Prevention Resources	http://wch.uhs.wisc.edu/01-Prevention/01-Prev-EvidenceBased-matrix.html	Disease prevention, youth development, underage drinking; includes resources for advocacy