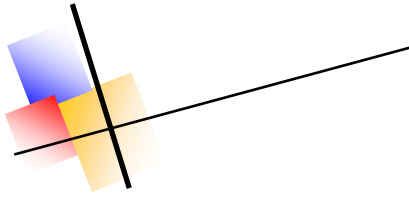


**FINDING OUT “WHAT WORKS”:  
A Guide to Finding the Evidence for  
“Evidence-Based Intervention”**

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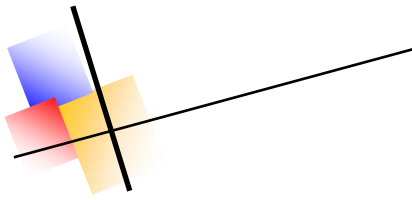
March 2005



## **Finding Out What Works? A Guide to Finding the Evidence for Evidence-Based Interventions**

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## I - Purpose of This Guide

**What are “evidence-based interventions?”** Increasingly, health providers are urged to base their interventions on evidence from research which shows that an intervention or treatment is effective in achieving the desired outcomes. This is called “evidence-based medicine” in medical circles, but the principles underlying this movement can be extended to many other types of programs and interventions. Often, the evidence about major medical problems is now summarized into “guidelines” for effectively treating each problem or condition. Traditionally, the ultimate outcome in medical research has been reduced mortality (fewer deaths), but more recent emphasis is also given to many other outcomes, such as reduced incidence of disease, improved quality of life, improved status of disease indicators (e.g., blood pressure, HbA1C level for diabetes, or cholesterol level) and the reduction of unhealthy behaviors, such as smoking and substance abuse. Using similar strategies in community-based projects can help them to be effective in addressing the community problems that are described in the “needs assessment” section of project proposals.

**What is the role of “evidence-based intervention” for NJHI projects?** This guide is based on the premise that the use of “evidence-based interventions” can assist local health and health-related projects to become more effective. Projects funded by the New Jersey Health Initiatives are intended to be innovative in bringing effective new practices to their own local areas. They can and should also use the best available evidence from prior research to choose intervention strategies that are linked with evidence for their effectiveness and evaluation tools with known reliability and validity. Since NJHI is not itself a research program, its funded projects are not expected to do comparative evaluations to establish the causal effectiveness of their interventions. They are most likely to achieve success by building on the evidence and experience from prior research in their identified problem area to implement evidence-based interventions.

Using both the results and measurement methods from prior research can be helpful to NJHI projects in several ways:

- To help plan activities that will be *effective* in addressing their project’s problem area, rather than activities that are untried or have been shown to be ineffective;
- To help identify outcome measures and other evaluation tools that can be useful in measuring the processes and outcomes of the project;
- To help document and validate the logical links between the project components implemented, the immediate outcomes achieved, and the longer-term intended outcomes that provide the purpose or rationale for their project.

**Why is a Guide needed?** Project staff may not know what interventions are effective in their fields, or how to find relevant evidence. While the internet is now full of web sites that have information about nearly every conceivable topic, it may be difficult

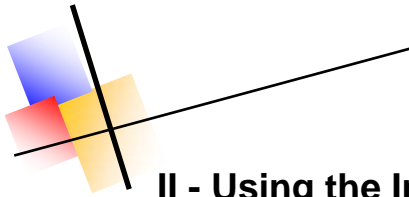
to effectively navigate the web to find the evidence you need. Further, some project staff members may not know how to critically evaluate the information they find or to judge whether that evidence is adequate to document the effectiveness of an intervention. This Guide is intended to help close these gaps by putting the evidence that exists on the web in the hands of potential users and offering a number of “tips and tools” for finding this information. The guide assumes only a beginning level of understanding about how to use the internet, and how to assess the value of the information found. More advanced users are urged to skip portions of this Guide that they already know, and to focus on parts of the Guide that are useful to their project’s current status.

This Guide is focused on web-based information; other informational resources such as research-oriented libraries are also quite useful. If you have access to such a library, your first step might be to see if you can get help from a reference librarian to locate evidence relevant to your project.

**Getting Started.** In order to use this Guide effectively, you need to have in mind a problem or topic area that you are addressing, such as services for home-bound elderly, or smoking reduction among adolescents, or early childhood education. It would be desirable to have an idea of your general objectives or project goals, but these goal areas are likely to become more refined as you find and work with the evidence about relevant previous projects. The use of a logic model which describes explicitly your intended activities and related outcomes can help to focus on the types of project activities and outcomes you are searching for. However, finding and digesting the prior evidence may also help you to specify your Logic Model.

**Figure 1 - Is Your Intervention at the “State of the Art?”**





## **II - Using the Internet to Find Relevant Evaluative Research**

Many types of web sites might contain relevant evidence from prior evaluations and research. Look especially for research summaries or syntheses that have already assessed and summarized research evidence about effective interventions in your topic area. The sources suggested below are ordered to provide a suggested search strategy to help you find the evidence you need as quickly as possible. Nevertheless, sometimes the topic you are seeking may be called by a different name in relevant sites, or you will find sites about your topic that do not provide actual evidence about the interventions being advocated. Do not become discouraged easily - keep looking! Think about alternative terms or topics that could lead to the relevant evidence.

### ***A. Professional associations in your content area***

Your first source might be to look on the web site of professional or advocacy associations in your content area, such as the American Diabetes Association, National Alliance for the Mentally Ill (NAMI), and so forth. If the site has a “research” or “publications” link, this might lead you directly to relevant evidence about effective interventions. If the site describes interventions relevant to your program, look for a topic or sidebar within that section for “research background” or “measurement.” The professional association’s site might also have “hot links” to other sites with relevant information for you. (A “hot link” is usually presented in a different color of type. When you click on that word, you will go to that linked site. To return to your initial site, press the “back” button one or more times, or exit from the linked site.)

A first strategy is to look for actual research evidence. However, if a particular site does not lead you to research evidence, you may find that a highly credible professional organization advocates using the intervention that you plan to implement. This may give you some assurance that the intervention could be effective at your site. Does the site indicate that some type of expert panel was involved in selecting or validating the interventions being advocated? Be careful, however: sometimes an intervention becomes popular with advocates before effectiveness evidence is available or in spite of negative evidence. For example, the DARE program – Drug Abuse Resistance Education - continues to be used in many educational settings in spite of substantial evaluation work which shows that it is not effective in reducing teen drug use.

### ***B. Government web sites***

A second potential source of information is web sites of government agencies, especially federal agencies that fund research and evaluations in your content area. These sites may have a “what works” page or research summaries which will provide needed evidence. Look especially for reports or summaries of completed research, rather than lists of funded research in progress. Use the site’s “search” capabilities to

quickly find the topics you are looking for. Here are some web addresses of some federal agencies relevant to the health and health promotion fields:

Within the Department of Health and Human Services:

- [Administration on Aging \(AoA\)](http://www.aoa.gov) - [www.aoa.gov](http://www.aoa.gov) For programs and services related to the elderly.
- [Administration for Children and Families \(ACF\)](http://www.acf.hhs.gov) - [www.acf.hhs.gov](http://www.acf.hhs.gov) For programs concerning family assistance (welfare), child support, child care, Head Start, child welfare, and other programs relating to children and families.
- [Agency for Healthcare Research and Quality \(AHRQ\)](http://www.ahrq.gov) - [www.ahrq.gov](http://www.ahrq.gov) Funds research/evaluation on health services, consumer assessment, health care costs and markets, quality assurance and other topics.
- [Centers for Disease Control and Prevention \(CDC\)](http://www.cdc.gov) - [www.cdc.gov](http://www.cdc.gov) Funds programs and research on a wide variety of health conditions, including birth defects, injury & violence, chronic diseases, disease prevention & health promotion; also has national and state statistics. Also [www.thecommunityguide.org](http://www.thecommunityguide.org).
- [Centers for Medicare and Medicaid Services \(CMS\)](http://www.cms.hhs.gov) - [www.cms.hhs.gov](http://www.cms.hhs.gov) For programs and evaluations concerning Medicare and Medicaid, including research on health care quality.
- [Food and Drug Administration \(FDA\)](http://www.fda.gov) - [www.fda.gov](http://www.fda.gov) Funds and regulates programs and products regarding food/obesity, medical devices, cosmetics and pharmaceuticals.
- [Health Resources and Services Administration \(HRSA\)](http://www.hrsa.gov) - [www.hrsa.gov](http://www.hrsa.gov) Programs providing free or low-cost health care (community health centers), treatment for people with HIV/AIDS, maternal and child health, health professions training (including the National Health Service Corps and Nursing Education Loan Repayment Program) and organ donation.
- [Indian Health Service \(IHS\)](http://www.ihs.gov) - [www.ihs.gov](http://www.ihs.gov) Funds health-related programs and evaluation for interventions with American Indians and Alaskan Natives.
- [National Institutes of Health \(NIH\)](http://www.nih.gov) - [www.nih.gov](http://www.nih.gov) Funds both basic and applied research on a wide variety of diseases (cancer, heart disease, diabetes etc.) including drug abuse, alcoholism and mental health.
- [Substance Abuse and Mental Health Services Administration \(SAMHSA\)](http://www.samhsa.gov) - [www.samhsa.gov](http://www.samhsa.gov) Funds programs and evaluations for individual and community-oriented interventions for both prevention and treatment of mental health and substance abuse problems.

Health services research and evaluation is also conducted by the US Department of Veterans Affairs, found at [www.VA.gov](http://www.VA.gov) . Other agencies, such as the US Department of Housing and Urban Development, at [www.HUD.gov](http://www.HUD.gov) and the US Environmental Protection Agency (EPA), at [www.EPA.gov](http://www.EPA.gov) might also have relevant information if your program involves topics related to their content focus.

**Figure 2 – Example of web page search result, from CDC**

The screenshot shows the CDC website search results for the query "community health worker". The page includes the CDC logo, navigation links, and a search bar. Below the search bar, there are tabs for "Health & Safety Topics", "Publications & Products", "Data & Statistics", and "Conferences & Events". The search results are displayed in a table with columns for "Description" and "Date".

**Search Results**

You searched for: "community health worker"

Search again: "community health worker"  [Search Tips](#)

**Related Topic Areas**

- National Institute for Occupational Safety and Health (NIOSH)
- Workplace Safety & Health

1-50 of 67      1 2 | next >      [Hide Summaries](#)

Description	Date
<b>Cancer - NBCCEDP - Community Health Worker Programs Materials and Breast and Cervical Cancer Messages</b> A Handbook for Enhancing Community Health Worker Programs: Guidance From the National Breast and Cervical Cancer Early Detection Program (Part 1), and Breast and Cervical Cancer Messages for Community Health Worker Programs: A Tra...	Jan 21, 2005
<a href="http://www.cdc.gov/cancer/nbccedp/training/trainpdfs/tp-section1.pdf">http://www.cdc.gov/cancer/nbccedp/training/trainpdfs/tp-section1.pdf</a> SECTION I: METHODS FOR ENHANCING COMMUNITY HEALTH WORKER TRAINING Methods for Enhancing Community Health Worker Training CHW Training Packet □ CDC/DCPC 6 Facilitation Guidelines As a trainer, your goal is to help participants learn ...	Jan 09, 2003
<a href="http://www.cdc.gov/cancer/nbccedp/training/trainpdfs/hb-introduction.pdf">http://www.cdc.gov/cancer/nbccedp/training/trainpdfs/hb-introduction.pdf</a> DEPARTMENT OF HEALTH AND HUMAN SERVICES PUBLIC HEALTH SERVICE CDC CENTERS FOR DISEASE CONTROL AND PREVENTION NTC Division of Cancer Prevention and Control National Training Center A Handbook for Enhancing Community Health Worker P...	Jan 09, 2003

**C. Google and other search sites (search engines)**

The web now contains several sites, such as Google and other sites listed below. These sites are free. Their purpose is to help you find the information you are seeking about specific topics. However, use of a broad term as the basis of a search is likely to give you a list of thousands of sites that contain that word or phrase, which is not very efficient in getting you to the research evidence you need. To effectively use a search engine, you should narrow your search strategy by combining several search terms in your search request (see below).

Google and other search engines can also be very useful for identifying the web site addresses of specific individuals or organizations. For example, if you want to find the web address of the American Diabetes Association, or you don't know if ADA's proper name is "Diabetes" or "Diabetic," you can enter the name American Diabetes Association as your search term. The association is likely to come up early in the list of "hits", and you can just click on it, and then write down its web address (or add it to your list of "favorite" web sites) to return to it easily. Another way to search is to enter the name of a person, for example a researcher who has been doing research in a relevant area.

Some web addresses for major search engine sites are the following:

- [www.google.com](http://www.google.com) - for Google
- [www.vivismo.com](http://www.vivismo.com) - has a search strategy that returns "clustered" or categorized search results.
- [www.yahoo.com](http://www.yahoo.com) - for Yahoo

*Specifying your search terms.* To make your search for relevant evidence more powerful, you must specify your search terms as exactly as possible. Some tips on commonly used ways to specify a search are as follows:

- **Use a specific phrase:** Use a phrase to refer to your content area, and enclose the phrase in quotation marks (e.g., "children's health"). The search engine will look for the exact phrase in the exact order you specify.
- **Use several keywords with "or":** Use "or" between key words to find all references to one or both key words (e.g., "ulcer" or "sore").
- **Use several key words with "and":** Use "and" between key words to find all references with both search terms (e.g., "health" and "system").
- **Use a wildcard:** Use one asterisk after a root word to find all terms that include that root word, with different endings (e.g., "research\*" will find entries containing the words "research", "researcher", and "researching" and so forth).

Here's an example: a search on Google for the terms ( "Community outreach workers" and "health" ) yielded a list of more than a million entries, but narrowing the search terms to ( "community outreach workers" and "health" and "research report" ) generated a list of 42 entries appearing to be actual research reports!

More guidance for locating information using Google is available on the free site [www.googleguide.com](http://www.googleguide.com). It contains an online tutorial for novice Google users, as well as one for advanced users. It includes very explicit advice on how to specify your Google query, as well as tips on understanding the results you get back, and how to use special tools. It also includes links to further resources and to published guides.

#### **D. Networking and use of “list serves”**

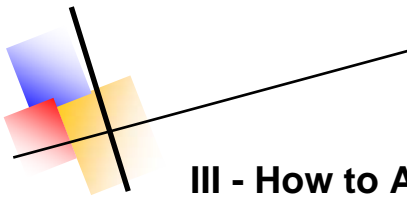
*Email:* Sometimes your first “tip” on where to find relevant evidence will come from professional colleagues in other agencies or at professional meetings or conferences. Where did you first get the idea for the intervention you are proposing to use? If you learned about it at a conference or professional meeting, you may want to contact the speaker(s) who presented it to inquire about the background evidence for the intervention they described. Many conference programs include the contact information for speakers in their index or appendix. If the speaker is a researcher, then that person may have the evaluative research reports you are seeking, or can direct you to relevant web sites or to other researchers. A quick email to the author can sometimes yield a research report (as an attachment) within minutes.

*List serves:* Another networking tool is to use “list serves” that are forums for people in a particular discipline to dialogue about professional issues. For example, the American Evaluation Association (AEA) is a professional association of and for evaluators. AEA maintains a list serve that anyone can join and get information from, called EVALTALK. You do not need to be a member of AEA to join EVALTALK. After subscribing to this list serve, you can post questions to everyone else on the list about the topic you are seeking, for example, “Does anyone know of prior research or evaluation about the effectiveness of *intervention X*, with *population Y*?” EVALTALK also maintains an archive of messages posted since 1997, which you can access after you become a member

To subscribe free to EVALTALK, send an e-mail message to [listserv@bama.ua.edu](mailto:listserv@bama.ua.edu) . The body of the message should read:

SUBSCRIBE EVALTALK Firstname Lastname

Replace the terms First Name and Last Name with your first and last names. Leave the “subject” line in your e-mail blank and do not include anything else (such as your usual “signature” information) in the body of the message. You will be automatically added to the list and will be sent a copy of the current information file and instructions for using the list serve. If you have any problems, have other questions about AEA, or would like to become a member, you can contact its web site at [www.eval.org](http://www.eval.org) .



### **III - How to Assess the Research Studies or Other Evidence**

Assuming that your search was successful in locating one or more research-based studies about your topic area and planned intervention, the next step is to assess these materials for the credibility of their conclusions. How can you assess the validity of the authors' conclusions about the effectiveness of the intervention discussed? It is important to realize that a paper *describing* an intervention, or illustrating how people were helped by it, does not itself provide evidence that measurable outcomes are caused by that intervention. If you do not have a background in performing or assessing research, the papers might seem to contain a lot of jargon and incomprehensible methodology. One solution is to try to understand the key points yourself, using the pointers in this section. You might also obtain help from an evaluator or other researcher to help you decipher the methodology.

#### ***A. Using results from multi-study reviews of prior research***

If the research report you found is a summary or synthesis of prior research, you are in luck because that summary is likely to be based on the studies selected for methodological quality by the expert reviewers. Look for a section describing the methodological criteria for including a study in the review – does it mention reasonable criteria (for instance, those listed below in section D)? Was more than one person involved in doing the review and summary, such as a panel of reviewers with expertise in that content area? If the answers to these queries are generally “yes”, then you can have reasonable confidence that the interventions cited as effective are indeed capable of achieving the specified outcomes, among the populations included in the original studies.

#### ***B. Look for information about who selected the intervention or “best practice” – Their credibility? Their criteria?***

If the information that you find is not itself a synthesis or report of research results, it may still provide useful evidence for your intervention. For example, a web site may have a “what works” section or may describe recommended interventions, but not provide a link to reports of research results. In this case, you may need to depend on the credibility of the person or group that selected the interventions. Are clear criteria given for selecting the interventions to include? Were intervention selections based on research having reasonable criteria like those listed in section D? Does the selection panel include researchers whose role was to assess the adequacy of the methods used in the original research? Does the site or information source list additional sources of information about each intervention? Again, the more that these questions are addressed positively, the greater confidence you can have in the credibility of the information presented.

### ***C. Is the evidence linked to major standards in your content field?***

Another question to ask is whether the evidence you found is linked to major accreditation standards or other quality assurance requirements in your content field. For example, hospital operations need to be accredited by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), and health insurance plans are increasingly called upon to meet the quality criteria of the National Committee for Quality Assurance (NCQA). Is the intervention itself endorsed by a major accrediting or quality assuring body? Does your source provide guidance on how to meet one or more of these quality standards or outcomes? This guidance may suggest interventions that are effective in achieving the outcomes. Further, these quality standards are often useful as key outcome *measures* for projects in similar topic areas, such as children's asthma, or managing diabetes. For example, the NCQA system of HEDIS measures contains 61 sets of measures in 8 categories, including measures of the effectiveness of care, of access to care, and satisfaction with the experience of care. The NCQA web site is at [www.ncqa.org](http://www.ncqa.org) .

### ***D. How to assess research evidence from individual studies or papers***

If you have located and downloaded individual papers reporting the evaluation of effectiveness of an intervention of interest, you need to assess each paper for its quality and relevance to your project. Some assurance of quality is provided if the paper was published in a hard-copy, academic journal, because most journals require peer-review of the manuscripts for methodological adequacy before publication. And yet, not all published papers are focused on the questions you will be trying to address, and not all journals have the same standards of rigor in assessing the methodology. You should certainly think about the methods underlying the conclusions before accepting any article's evidence as conclusive. Several key questions you should ask of each article are the following:

**1. *Relevance to your project.*** Does the paper report on the outcome effectiveness of an intervention similar to the one you are planning? Or, if you have not yet decided on an intervention to address the problem area you are tackling, does the intervention described appear to be relevant to your situation? Does the paper describe the targeted treatment or intervention in sufficient detail for you to understand its component activities? If the intervention described is not relevant to your project, the paper may not be useful to you.

**2. *Sample size and selection of participants.*** Was the number of participants in the research ("subjects" in a research design) large enough to provide at least minimally adequate "statistical power" to detect meaningful change? Usually, this requires about fifty or more individuals in each of the major groups compared. Does the report mention "statistical power" calculation used to estimate the number of individuals needed for the research? Although the specifics of statistical power calculations are beyond the scope of this brief guide, if the researchers have considered and reported their statistical power, they are likely to have satisfied this criterion. Were the participants in the

intervention research similar to your population in their demographics, such as age, gender, ethnicity, socio-economic level (SES)?

**3. What outcome measures were used?** Evidence about effectiveness will be reported in terms of one or more measures of the outcomes assessed. You will need to consider whether these are the same outcomes that you intend to achieve in your project, or are very similar to your intended outcomes. If you had different outcomes in your draft logic model, you might want to consider modifying your outcome measures to be consistent with the prior literature. In this case, you can use these validated measurement tools. Does the report discuss its techniques for assessing the reliability and validity of key measures? Validity is usually discussed in a narrative showing how the measure fits the intended purpose, or how it is congruent with other known measures of the same outcome. Reliability refers to how consistent the measurement is among different users, or among the items of a scale or questionnaire for internal consistency reliability. In both cases, a desirable level for the reliability coefficient is above .80 (as an alpha coefficient or correlation coefficient).

**Figure 3 - Were the Measurement Instruments Appropriate?**



**4. Comparative design used.** A key feature of research to assess the effectiveness of an intervention is to provide evidence about what outcomes would be likely to occur in the absence of that intervention (also called “counterfactual” evidence). The most frequent design for doing this is to use a comparison group that did not receive the intervention. A comparison group can be comprised of individuals or other units, such as clinics or classes. The “gold standard” for intervention in the health field is a “randomized” design, in which individuals (or other units) for both the intervention and the comparison group are identified in advance, then randomly assigned to receive either the intervention or a comparison treatment (such as an alternative intervention). This is often called an “experimental” design in the evaluation literature. Implementing an experimental design in a real-life setting requires attention to many details, such as avoiding attrition of the research participants, documenting the full delivery of the intervention, and allowing adequate time for the outcomes to occur before the final measurement. A good research report should include information on how these details were addressed.

Many variations of this design exist, and are often called “quasi-experimental” designs. These include using comparison groups that seem similar to those receiving the intervention, but were not randomly assigned. Another is ex post facto “matching” of individuals in the intervention to individuals not in the intervention. Another type of rigorous design that is often used for assessing policy interventions is an “interrupted time series” design, in which the trend line over time for the outcome of interest is examined statistically before and after the start-up of a new policy or population-level program (the “interruption”) to determine if the outcome trend changed. For interventions into larger scale organizations or systems, the evidence of effectiveness is usually in the form of one or more case studies about the targeted change, with effectiveness argued through the use of logical and narrative evidence, in addition to or instead of statistical analysis. Some questions to ask about the comparative design are: Does the paper explain what type of design for assessing effectiveness was used? Does it provide the rationale for why this was the best available design, if it was not an experimental design? Does the paper provide sufficient detail about the research to convince you that it carried out the design appropriately? Is a statistical test used for comparing the intervention and the “control” group, in order to assess whether the intervention was effective?

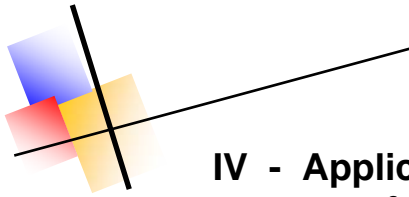
**Summary.** A summary of the considerations in assessing published research evidence and key questions to ask is shown in Figure 4, below. There is no hard and fast rule for judging whether the evidence is adequate, if the research article you have does not address all of these issues. In general terms, the more that all these questions are discussed in the article, the “stronger” its evidence is likely to be - that is, you can have confidence in its conclusions. If some of these questions are not answered, the evidence may be relatively “weaker”, but still somewhat useful. You might be able to clear up some points by contacting the author(s). Or, you might have other evidence about the same intervention that helps to strengthen the case for its effectiveness.

**Figure 4 - Summary of Criteria for Assessing Research Articles About Intervention Effectiveness**

<b><i>Research Criteria</i></b>	<b><i>Example Questions</i></b>
1. Relevance to your project	<ul style="list-style-type: none"> <li>✚ Is the intervention similar to your intended plan?</li> <li>✚ Is there a clear description of the intervention components?</li> </ul>
2. Sample size and selection of participants	<ul style="list-style-type: none"> <li>✚ Is the number of participants large enough to detect change? (statistical power)</li> <li>✚ Are the participants similar to your population?</li> </ul>
3. Outcome measures used	<ul style="list-style-type: none"> <li>✚ Are outcome measures relevant to your project?</li> <li>✚ Are reliability and validity of key measures discussed?</li> </ul>
4. Comparative design used	<ul style="list-style-type: none"> <li>✚ Is a comparative design used, with an explanation for its appropriateness?</li> <li>✚ Does the paper describe details of the research, including:               <ul style="list-style-type: none"> <li>◇ Avoiding attrition of participants?</li> <li>◇ Documenting implementation of the intervention?</li> <li>◇ Allowing time for outcomes to occur?</li> </ul> </li> <li>✚ Is a statistical test used for assessing whether the intervention was effective?</li> </ul>

**E. Next steps after assessing evidence**

The research article or summary of effective interventions may have good information that a particular intervention is effective, but only a sketchy description about what the intervention *is*, in practice. You will need to know the specific components and detailed activities in the intervention that was effective, in order to replicate it in your site. You may need to obtain a more detailed description of the program or intervention activities, such as a user’s guidebook to implementing the program, or a fully detailed description of the program. At this point you may want to talk with or e-mail current or prior users of that program or the authors of the research article. Many researchers are willing to send you additional information about their program, or may have a center or website about that intervention. You may want to visit a site using their program, to obtain first-hand information about how to implement it. At this point, your questions turn to considerations about how the intervention is implemented in practice, rather than questions about whether it was effective in achieving desired outcomes in the initial sites.



## IV - Applications: How to Implement Interventions from Evidence-Based Searches

Now you are ready to use the information you found that is relevant to your planned intervention! You will want to engage your stakeholders - such as other staff members, your research staff, your Board of Directors, and planning groups – in thinking about the evidence for effective interventions and how it applies to your project. You may need to write a brief summary of your findings and their sources for this purpose. Meetings with stakeholders might focus on how the evidence about interventions in your problem area is potentially relevant to your project's objectives, clients, and resources. Does the evidence fit with and help provide the background “theory of change” for your project's logic model? Does the evidence from prior research suggest that you might want to change or expand your logic model?

Several key considerations will need to be discussed with your staff and other stakeholders in order to begin using a potentially effective practice:

***Feasibility.*** Which of the interventions that were found to be effective are feasible to implement in your site? What resources would be needed? Do you have the resources needed to implement the most attractive intervention? These include enough staff members with needed skills, administrative support, appropriate building space and physical facilities, and funding for support components (such as transportation, supplies for participants, or incentives to encourage initial participation, etc.)? Will staff training be needed?

***Support components from developer.*** With the growth of evidence-based interventions, your project might be aided by additional materials available from the intervention researcher/developers. These can include guidebooks for using the intervention, staff training workshops, measuring tools to assess key outcomes, or the designation of “model program sites” that your staff could visit and observe. Some programs even develop software tools to help aggregate, analyze and display data from the recommended outcome measures, to assist your local evaluation. Look for these support components and take advantage of them when possible!

***Congruence with your current practice.*** A key factor in implementing new projects or methods is the extent to which the new practice is congruent with, or conflicts with, the current organizational culture and the professional beliefs of staff members. For example, an innovative intervention focusing on “empowering” staff members or clients will conflict with an organizational culture emphasizing “top down” setting of rules and standards. In this situation, the intervention is likely to need strong support from high-level administrators that they intend to do things a bit differently for this project. Similarly, if staff members' professional training has emphasized a particular set of steps for working with their clients, an otherwise strong intervention using other strategies might meet with some initial opposition. That intervention might still be useful, but its implementation is likely to meet with more barriers. You may need to

introduce it gradually, encouraging trial or pilot use so that staff members can see if they like the new method, and whether it can be implemented in your environment. Can it help them achieve *their* objectives for working with clients? Focusing on defining and measuring outcomes for clients may itself be a major change that requires some time to get used to.

**Modifying the intervention.** In many cases, your stakeholders may want to change some components of the intervention from its research-based version, in order to help it “fit” within your environment. Changing or modifying the intervention has been found to occur frequently when an intervention developed in one location is disseminated to another site, and can be helpful in gaining stakeholder acceptance. But, you need to think carefully about what were the original components that are likely to be critical aspects for success, and avoid modifying these components in fundamental ways. Often, these are the key activities that directly interface with the clients, and that led to the behavioral changes measured as effective outcomes for clients. Implementing these critical success elements with fidelity is an important concern in order to achieve the same level of success. On the other hand, activities that supported implementation in the research site may be less important for achieving the outcomes and more easily adapted to your conditions. Further, you may need to add components that were not present in the original intervention, which are needed for your clients (e.g., transportation, child care, supplies, etc.).

### Figure 5 – Implementing a New Program Takes Everyone’s Efforts!



**Trial or pilot use.** It is often desirable to start a new intervention by trying out its procedures on a pilot basis, for example in only one of several clinics, or by a few staff members eager to try it. Such pilots can help work out the “bugs” that inevitably accompany a change of procedures. You will want to use “formative evaluation” methods, such as close observation of pilot operations, focus groups, or key informant interviews, to monitor the implementation and outcomes of the pilot use of the new intervention. Can staff members do it? Are additional components needed to support implementation? Do clients participate and benefit from it? Does your project achieve

any of the changes in your “intermediate outcome measures” that are in your logic model?

***Plan for local evaluation.*** To “close the circle” of planning for evidence-based intervention, you will also need to design your project’s local evaluation of its full implementation in your site. Your evaluation will need to document that the major components of the intervention are in fact implemented in your site, and to show evidence that your immediate and short-term outcome measures indicate change in the desired directions. Often the research reports will suggest key outcome measures or tools that you can use to measure outcomes for clients. Your evaluation need not focus on using a comparative research design if there is already strong evidence that the intervention is effective (unless, of course, comparative evaluation is demanded by your funder or project sponsor!)

If you have followed the steps of “evidence-based intervention” to this point, your project should be well on its way to achieving effective change! Although not every problem area has a full array of effective interventions for various client needs, many such interventions have been developed and validated by extensive research and evaluation efforts over the past few decades. You and your stakeholders should invest your resources wisely by using a relatively small amount of planning time up front to find the evidence that will help your project succeed. This process should be a thoughtful application of prior practice to your site, but not a mindless imposition of inappropriate components. Your project can be most effective in solving local needs by making the best possible application of what is already known!