Issue Paper

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To understand and promote healthy behaviors and positive social development among diverse populations, we:

♦ conduct research on factors that influence development;

♦ develop and test the effectiveness of interventions;

♦ study service systems and work to improve them;

♦ advocate for science-based solutions to health and behavior problems; and

♦ disseminate knowledge, tools, and expertise produced by this research.

The Use of Evidence-Based Policy for State and Local Decision Makers

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Decision makers at state and local levels throughout the United States have been facing drastic declines in revenue and significant budget crises. In these times it is more important than ever to ask the question "Are our policies effective?" In order to answer this question, local and state decision makers must dispassionately evaluate existing data about the impact of policies. This paper aims to provide a useful guide that will help with that evaluation.

Evidence-based policy is "an approach that helps make well-informed decisions about policies, programs, and projects, by putting the best available evidence from research at the heart of policy development and implementation." [1] Some have confused evidence-based programs with evidence–based policy. While programs are specific initiatives or interventions, policy refers to decisions made by local, state, or federal decision makers which are reflected in statutes, administrative codes, monies, and procedures that are expected to produce positive outcomes in the targeted population.

Two types of evidence-based policy will be discussed in this paper:

1. Policy which installs evidence-based programs.

2. Non-program-based policies.

1. Examples of **evidence-based program policies** are plentiful and include mandating the use of Aggression Replacement Therapy for certain categories of juvenile offenders;[2] enacting legislation to provide nurse home visitation for at-risk children aged birth to two years;[3] mandating that a specified percentage of state or federal funds be used for evidence-based programs;[4] and legislating the use of The Incredible Years program for parents of at-risk young children.[5]

In the field of medicine, public policies based on scientifically rigorous evidence have produced extraordinary advances in health over the last 50 years. By contrast, in most areas of social policy – such as education, poverty reduction, and crime prevention – government programs often are implemented with little regard to evidence, costing billions of dollars yet failing to address critical social problems.

Coalition for Evidence-Based Policy [6]

2. Non-program-based policies mandate limits on behavior, rewards for behavior, or changes in the way in which institutions operate. Examples include primary offense safety belt laws to increase driver safety,[7] and delayed school start times for teenage

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students to improve attendance and enrollment rates and decrease sleeping in class.[8]

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Example of an effective prevention policy

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The Minimum Legal Drinking Age (MLDA) is probably one of the most well-researched alcohol control policies. MLDA addresses risk factors for at least two behaviors: alcohol use and risky driving. For alcohol use, having a higher MLDA (age 21) reduces availability, a risk factor for alcohol use. Alcohol use itself is a risk factor for traffic crashes for all drivers, but especially for younger, less-experienced drivers.

Wagenaar, A.C., & Toomey, T.L. (2002). Effects of minimum drinking age laws: review and analyses of the literature from 1960 to 2000. *Journal of Studies On Alcohol, Suppl. 14*, 206-225.

Although local and state decision makers have begun to install evidence-based programs, there is still a great need for non-program-based policies. Often, instead of basing policy on rigorous evidence, decisions are made based on a variety of other factors, including anecdotal evidence, pressure from interest groups, political advantages, time constraints, the need for compromise, media, and public opinion polls. However, basing policy on these factors alone can lead to a waste of taxpayer money and may even do harm to the people the policies are intended to help. Examples of this include implementation of the Scared Straight program which was intended to deter juvenile crime but had the opposite effect;[9] and transfer of juvenile offenders to adult criminal courts, which the *American Journal of Preventive Medicine*, the Centers for Disease Control and Prevention, and others have found counterproductive. Juvenile transfer led to an increase in violent crime upon release for those who experienced the adult system compared to those who remained in the juvenile system.[10, 11] Boot camps are

also among the juvenile justice programs characterized by the Office of the Surgeon General to "be consistently ineffective."[12.]

There has been considerable debate about what standards should be used in judging whether a *policy* is evidence based. There has been greater consensus favoring the installation of policies which install evidence-based *programs*.

In determining whether a program is evidence based, the "gold standard" is *randomized trials.* This is the standard used by the Washington State Institute for Public Policy (WSIPP), which calculates the return on investment to taxpayers of programs and policies. There should be empirical evidence of cause and effect and the population being targeted should be clearly defined. However, since the recommendation of having two or more randomized trials showing effectiveness often can not be met, WSIPP, as well as other researchers, may instead require at least one large randomized trial with a rigorous evaluation that measures outcomes and is capable of replication in "the real world."

A different standard is employed by the Centers for Disease Control and Prevention, which uses *systematic reviews* to evaluate a variety of health-related programs, including drug and alcohol and mental health programs. Many other researchers use this approach as well.[13] Systematic review is described as "a synthesis of research evidence on a particular topic, such as drug court effectiveness, obtained through an exhaustive literature search for all relevant studies using scientific strategies to minimize error associated with appraising the design and results of studies."[14]

Whether using evidence that is based on randomized controlled trials or on systematic reviews, researchers agree that faithful replication of the proven program is key to the success of evidence-based program policy.[15] Decision makers should insist on quality control

measures when designing policy around these programs.

There are a number of resources available to those who want to learn more about evidence-based programs (see below). It should be noted that not every program on these websites meets the standards recommended in this paper. However, these sites offer a starting point for finding evidence-based programs.

Resources for effective programs

- Blueprints for Violence Prevention, Center for the Study of the Prevention of Violence www.colorado.edu/cspv/blueprints/
- Office of Juvenile Justice and Delinquency Prevention Model Programs Guide www.ojjdp.gov/
- Coalition for Evidence-Based Policy, Social Programs That Work www.evidencebasedprograms.org
- Child Trends, What Works: www.childtrends.org
- Best Evidence Encyclopedia www.bestevidence.org

There is less agreement on standards for evidence-based policy when that policy is not program based. Much criminal justice, education, and human service policy falls into this category. Because it is more difficult to conduct randomized controlled trials for these policies, a systematic review is often used to evaluate the effectiveness of the policy. When systematic review is used, policy makers or their advisors should look at studies with strong, credible designs.

Components of a strong design include:

1. A clearly delineated target audience
2. Specified and measureable outcomes
3. Strong logic explaining why the policy may lead to better outcomes

4. An answer to the question, "Compared to what?" (Studies often use quasi-experimental designs without random assignment, e.g., interrupted time series designs, regression discontinuity design, or natural experiments.)
5. A significant favorable impact on the outcome.

In addition to the formal assessment of evidence of effectiveness, an economic assessment should be conducted which answers the question, "Do the benefits exceed the costs?" There are many policies that can be effective in reaching their goals, but their costs may make them a poor investment. The *Washington State Institute for Pubic Policy* (http://www.wsipp.wa.gov/) has done groundbreaking work in cost-benefit analysis of policies.

What should decision makers do when there is not adequate evidence on the effectiveness of a non-program-based policy? Given the paucity of research in this category of policy, this is a reasonable question. The decision maker may weigh all the available evidence and wish to proceed. However, in this case, the decision makers should insist that once the policy is enacted, it be evaluated for specific, well-articulated anticipated outcomes using at least quasi-experimental designs that can adequately answer the "Compared to what?" question. Only upon completion of the evaluation will they know whether or not taxpayers have paid for an effective policy or wasted their money. Decision makers should also ask for a risk analysis of the uncertainty of outcomes before the implementation of the specific policy.

Finally, although decision makers are not usually trained researchers, and have to be knowledgeable about a broad range of issues, they can usually find professional staff with research skills who can answer the questions around whether proposed policies meet the standards described in this paper.

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The Coalition for Evidence-Based Policy points out:

"…rigorous studies have identified a few highly-effective program models and strategies ("interventions"), suggesting that a concerted government effort to build the number of these proven interventions, and spur their widespread use, could bring rapid progress to social policy similar to that which transformed medicine." [6]

In these times of budget crisis we simply cannot afford to ignore the question, "What works?" In fact, even as painful as it is, the budget crisis may offer a silver lining because it provides decision makers with a natural opportunity to better understand the impact of programs or policies that are cut. If cuts must be made, decision makers could take advantage of the opportunity to assess the impact of programs that are cut. For example, if a program's budget is significantly reduced so that the entire population in need can no longer be served, the target population could be randomly assigned as to whether or not to receive services. The effects on those receiving the program could then be compared to those who did not, to further the knowledge about the effects of the program. This information could then be used to determine whether to increase support for the program or perhaps to abandon it altogether.

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