National Prevention Science Coalition
to improve lives

An Automated Clearinghouse to Improve Usability and Reach of Evidence-Based Strategies

The Evidence-Based Policy Act (EBPA) reinforces the need to infuse scientific evidence into the decisions of policy-makers and the utility of that information for communities. The Act will lead to the formulation of a protocol to effectively design policies that improve our lives while not wasting taxpayer money on unproven strategies.

The National Prevention Science Coalition to Improve Lives (NPSC) proposes the construction of an automated Clearinghouse that will broadly address the objectives of the Act by providing infrastructure for rigorously evaluated programs and policies shown to reduce problems (e.g., mental health disorders, adverse childhood experiences, delinquency, interpersonal violence, addiction) and promote positive outcomes in our communities. Until now, many strategies we invest in either have not been evaluated or have not produced sufficient effect sizes to justify their implementation or continuation. The proposed Clearinghouse will meet the needs of policymakers and agencies responsible for executing the mandate of the EBPA by organizing the large reserve of data on evidence-based programs and policies (EBPPs) within a platform amenable to uptake by a range of end-users (e.g., community stakeholders, practitioners, policymakers, governmental agencies, etc.).

There are several sources of existing data available to populate a Clearinghouse of this sort, with a clear path to selection, implementation, evaluation, and sustainment of EBPPs. Registries have been developed to provide end-users with detailed information on hundreds of EBPPs that have been evaluated and found to have evidence (rated on their level of effectiveness) to support their implementation. Additionally, a wealth of data has been collected by the federal government and other agencies and organizations reflective of a broad range of phenomena, from physical health to child maltreatment and criminal justice. These data can be used to determine whether existing strategies have exerted a beneficial effect in the localities where they have been implemented. This information can also help to identify the location and source of problems in our communities that require further investment.

Current data reserves, however, do not tend to be structured in a way that is accessible and usable for most end-users (see the Bridgespan Report for a detailed evaluation). An NPSC affiliate (RPC) conducted a survey of federal legislative offices and found that 52% do not use existing registries and 23% do so "rarely" because they are not aware of them. A user-friendly platform and a dissemination plan are needed to increase the uptake of these data. We recommend a means to facilitate the process of organizing the data for greater accessibility and instructiveness, thus improving policy decisions and investments. Our proposal is highly compatible with the mandate of the EBPA by incorporating federal agency and other data, as well as methodological components that will be readily accessible and understandable to those who stand to benefit. Ongoing conversations

lead us to believe there will be widespread support from Congress, the White House, OMB and federal agencies. And a growing number of national and local organizations have expressed an interest in evidence-based policy-making.

Preliminary Description of Automated Clearinghouse

We propose the development of a system—the "National Automated Clearinghouse for Evidence-Based Programs and Policies" (NACEPP)—that will provide comprehensive information on a range of evidence-based strategies for end-users; e.g., researchers (who populate the database), policy-makers (who need to know what to legislate and fund), and community organizations, practitioners and government agencies (that need to identify best practices). The data populating this clearinghouse will provide parameters needed to readily map available EBPPs to existing needs, whether that be to select the most effective violence prevention practices for any given community or to enact policies with greatest potential to reduce poverty. Also needed is the flexibility to include innovative, promising or budding programs that have yet to be subjected to rigorous evaluation but are in the database denoted by their stage of development and need for further study (as per the mandate of the EBPA).

Parameters will be intuitively searchable and fields will be delineated by relevant characteristics; e.g., outcome of interest (e.g., diabetes, addiction, academic failure); setting (e.g., school, family, community, national); target population (e.g., special needs children, parents, community stakeholders, minorities); intervention selection and detailed implementation protocols and frameworks (costs, timeline expectations to achieve impact, strategies to shift resources from existing to promising or evidence-supported approaches); pertinent literature and resources on assessing and utilizing research; cost-benefit analyses; and other information deemed helpful. The goal is to provide a comprehensive, one-stop resource that is more user-friendly and searchable on dimensions that are not currently available and/or comprehensible to the user, providing an efficient and valid method to guide policy-makers, community stakeholders, practitioners and others who stand to benefit from the resource.

The primary advantage of this Clearinghouse over others is that it would be both iterative and interactive and, thus, of greater utility to end-users. At all stages of navigation, weblinks would lead the user to external reference materials and databases and, when needed, will refer to experts or other users with relevant experience. For example, a user may require additional information on how to most effectively and cost-efficiently implement a particular program in their community, requiring more in depth guidance and delineation of the pitfalls or barriers, along with recommended solutions. In effect, the search engine would provide for the type of interaction via an artificial intelligence software that might occur in a conversation, where one statement or query leads to a more personalized, informative and instructive response. And with permission of experts, contact information could be provided to more intensively address concerns raised by users.

The need for implementation support is undoubtedly the most formidable obstacle to adopting EBPPs and proper installation protocols that ensure feasibility, fidelity, acceptability, appropriateness, reach and sustainability in any given community. All the best evidence shows that training, dissemination, and information alone, even with incentives and funding, typically results in 5-15% uptake. To address this pervasive issue, the Clearinghouse will offer a platform for contextual follow-up, implementation support/help, and recommendations for training, coaching and workforce development for end users and/or policymakers seeking to select, adopt/adapt, and inject

chosen EBPPs into policy. These capabilities remain a translational need unmet by other registries. The infrastructures and resources to support development, delivery and accountability aspects of this work are a critical component of this developmental work.

And finally, tor researchers inputting data into the Clearinghouse and/or partnering with end-users, there would be guidance on design, methods, statistical techniques, evaluation protocols, and strategies for translation. The Clearinghouse would also provide a searchable methodology section for researchers to fill in or update database gaps.

Proposed Demonstration

As mentioned, there are several existing registries populated by hundreds of programs, interventions and policies that have been subjected to evaluation (e.g., [Blueprints for Healthy Youth Development,](#) [Child Trends - What Works,](#) [What Works in Social Policy,](#) [Results First Clearinghouse](#) [Crime Solutions.](#) Unfortunately, in large part, they are not readily usable by most end-users without significant research training, nor are many end-users aware of these registries. The Clearinghouse described herein combines the strengths of these available databases within a user-friendly infrastructure and clearly delineated mechanism for mapping community needs to available evidence-based strategies. Uniform criteria and thresholds for designating programs and policies as evidence-based would be used, not only relative to the statistical findings from RCTs and other ratified research designs, but also the population significance of those results (e.g., how broadly are effects achieved?).[1]

As a first step toward these goals, the framework and platform would be constructed by engineers and programmers for housing well-tested interventions and applying rigorous scientific standards for certification. Working from existing registries will substantially reduce costs, expedite the development process, and provide instant recognition and legitimization. The project will enhance and improve upon the features built into existing registries, drawing on the Bridgespan study of the "What Works Marketplace," which provided key recommendations to enhance the demand for and use of evidence by key agency and community decision-makers when reviewing and selecting programs (Neuhoff, Axworthy, Glazer, & Berfond, 2015). The Bridgespan Group conducted interviews on both the supply and demand sides of preventive interventions and identified six gaps impeding the implementation of evidence-based knowledge:

- **Gap 1: Comprehensiveness**. Decision makers want information on a broader range of interventions with varying levels of effectiveness. They also want to know which interventions have not been reviewed or rated.

- **Gap 2: Implementation**. Decision makers want information about interventions beyond evidence of impact—including peer experience implementing the intervention—to help them make informed decisions. Few clearinghouses provide this level of information.

- **Gap 3: Guidance**. Decision makers are looking for guidance and support in selecting and planning to implement the appropriate intervention. Clearinghouses, however, are not set up to provide this, and the intermediaries in this space are still relatively limited.

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[1] In cases where there are inconsistent of registries, a [Bayesian Cost-Benefit Model](#) can be applied to resolve the conflict using meta-analysis.

- **Gap 4: Synthesis**. Decision makers are looking for more than just interventions. They also are looking for information on policies and management decisions, as well as synthesized findings and best practices. This information is not available systematically and can be difficult to find, even where it does exist.

- **Gap 5: Usability**. Users do not find clearinghouses easy to use, nor do they understand the differences between them.

- **Gap 6: Awareness**. Decision makers receive information about interventions from purveyors and peers, but they do not receive information about evidence in a systematic or effective manner.

NACEPP would fill each of these gaps by providing:

Gap 1 - Comprehensive information on a broad range of problems and corresponding interventions that policy makers and other constituents require to make informed decisions and implement solid programs that work. Ratings will be included to indicate whether interventions have been evaluated or not, and which have been shown to be either ineffective, "promising" or effective.

Gap 2 – Clear guidelines on the process of implementation, from general guidance on best practices, pitfalls and barriers, solutions and problem-solving, and researcher-community-government collaborations, to specific guidance for each EBPP.

Gap 3 – Step-by-step processes for identifying and selecting EBPPs that are most appropriate for any given purpose (e.g., tailored for specific community characteristics or decisions regarding state-level funding).

Gap 4 – Information on the need for particular policies and management systems to be in place for EBPPs to exert the greatest benefits, as well as a synthesis of the research in nontechnical terms and descriptions of best practices known to effectively target problems at hand.

Gap 5 - Understandable, concise, and unbiased information on EBPPs available in existing registries and databases that applies uniform "standards of evidence" criteria agreed upon in the field, thus avoiding the need for explanations of how they differ.

Gap 6 – An outreach campaign that will ensure all relevant constituents are aware of the NACEPP and its value-added to their individual mandates (see below).

Additional attributes include the following:

- In addition to covering a wide range of health outcomes, the platform for NACEPP could be readily expanded to include additional domains and outcomes such as environmental concerns, national security, the economy and most operations of government where evidence is available.

- Critical to its functionality and relevance to policy concerns is that legislative offices, administrative agencies and other users will have input into what policy areas to cover.

- Within the system, links will be provided to: (a) policy papers and briefs relevant to the topic, (b) organizations that are working on or interested in policies relevant to the topic and (c) legislative and agency offices with relevant policy objectives.

- When searching on a particular issue, once programs are recommended, a text box will automatically appear for additional information about relevant policy aspects for that program and issue (like addiction or specific juvenile justice concerns).

- And critical to this effort, to ensure its usability and utility, input will be sought from all potential end-users working in concert with experts on an ongoing basis.

These objectives for a clearinghouse can be accomplished with sufficient funding and commitment, as well as by calling upon the expertise of evidence-based policy-making organizations, academics,

researchers, current registry experts, federal government database keepers, implementation scientists, methodologists, computer scientists, and statisticians.

Once operational, a protocol will be established to ensure wide-scale awareness of the resultant clearinghouse, familiarizing potential end-users (e.g., policy-makers, agencies, community stakeholders, practitioners, foundations, think tanks, etc.) with its utility, in effect, advancing the uptake of EBPPs. It will also be important to end-users to provide information that is locally relevant (e.g., responsive to health surveillance data). A rigorous and well-tested marketing methodology for this protocol will determine resonance of messaging frameworks with different audiences for further refinement and targeting, and construction of an effective delivery vehicle. The NPSC has an extensive network of thousands of constituents (organizational and individual), as well as government administrators and policy-makers. Channels of communication will include the news media, social media, issue and policy briefs, one-on-one meetings with, for example, policy-makers or agency administrators, and workshops/seminars.

Policy Benefits

This undertaking will significantly benefit evidence-based policymaking by enabling our nation to more effectively deal with pressing policy questions, such as: (1) how to best educate and re-skill our young people to ensure successful futures; (2) what are best practices to prevent violence in society, (3) how do we promote population-level mental and physical health, and (4) what strategies hold the most promise of uplifting the most vulnerable and deprived in our nation. Answers to these questions will be facilitated by using an automated clearinghouse that builds on past efforts, is comprehensive, can be easily navigated, and is responsive to specific user needs.

The automated clearinghouse we propose would be designed to provide various constituencies with the means to more expeditiously and effectively make decisions that will benefit their work, outcomes of policies formulated, operations of government, and ultimately society as a whole. For example:

1. *Researchers* can readily access the available evidence, identify the gaps requiring further research and continuously add to the database of effective interventions and policy options.
2. *Policymakers* at all levels of government can more readily determine what are the best and most effective programs and policies to legislate and fund, calling upon relevant existing federal databases to aid in decision-making.
3. *Agencies* at all levels of government and community organizations can put into practice the most effective and cost saving programs and policies available, utilizing relevant databases that are incorporated into the clearinghouse.

After initial outlays, money saved by implementing best practices and policies shown to be impactful in reducing and preventing future problems can be used to support additional research needed to establish effects, track outcomes, support the clearinghouse and fund new legislation. Ultimately, such savings have potential to eventually make for a stronger economy and more effective government operations.

Summary

The following prescriptions, suggested by the Office of Management and Budget, are specifically well aligned with our above proposal:

- The creation of private-public partnerships that capitalize on the innovations in research and practice generated by national foundations (e.g., William T. Grant, Laura and John Arnold, Annie E. Casey, Robert Wood Johnson) and a social impact bonds approach that builds resources from both sectors, eventually leading to benefits that exceed the costs. Such collaborations will bring together experts in disciplines ranging from economics, computer science, design thinking and many others to employ a creative, data-driven, interdisciplinary approach to realizing new possibilities in how citizens and government can interact.
- More emphasis on applied research that improves citizen services and stewardship of public resources.
- Engaging academics, non-profits, private industry, data science and user-centered design applications that can feed this dynamic clearinghouse.
- Serving Americans in the Digital Age to maximize the benefits of having information at our fingertips.
- Rethinking delivery of citizen services and data, including IT investment and innovative and more utilitarian applications of data systems.
- Translating and increasing relevance of this clearinghouse from federal government usages to state and local applications.
- Possibly through federal government or foundation seed funding, identifying other sources of funding from the private sector have potential to increase investments and, again, support sustainable innovations.
- Test and learn how to apply innovative approaches to meeting the mission, service, and stewardship needs of the 21st century.

The clearinghouse will facilitate the achievement of these objectives and, in the process, address citizen needs through services and public resources that can be more effectively targeted, implemented and monitored.

This proposal is reflective of what policy-makers, practitioners, stakeholders and others need to make informed, adequately justified, and effective decisions when identifying EBPPs that will serve communities and the nation. We have outlined a general roadmap for the creation of a clearinghouse with details to be fleshed out after thorough discussion and consultation. Our hope is that the agencies authorized to execute the various mandates of the EBPA will include such a plan that will bring to fruition their charge to design a data infrastructure and incorporate results from existing and newly conducted studies. There is potential to greatly improve the operations of government, the services provided to citizens, and their financial impact.

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