

Coordinated Initiatives Between HHS Research Agencies and Social Programs Can Rapidly Build Scientifically-Valid Knowledge About “What Works” in Substance-Abuse/Violence Prevention, Early Learning, Poverty Reduction, and Other Areas

This paper proposes coordinated initiatives between HHS research agencies (e.g., NIH Institutes, CDC) and social programs (e.g., in SAMHSA, ACF, HRSA) to carry out scientifically-rigorous evaluations of promising social interventions in real-world community settings, so as to build the number of research-proven interventions. HHS could thereby significantly enhance its effectiveness in improving the public’s health and addressing major social problems. This proposal could be implemented using existing federal funds and statutory authority.

I. Problem To Be Addressed: The enormous gap between science and practice means that many U.S. health and social programs, designed to address important American problems, have unknown efficacy or may not be effective at all.

When government-funded social interventions – such as school-based substance-abuse prevention models, case-management assistance for low-income families, employment projects for disadvantaged workers, and literacy interventions for young children – have been evaluated in scientifically-rigorous studies, the studies find many ineffective or marginally effective. A few interventions have been found in such studies to produce sizeable, sustained effects on important life outcomes (e.g., employment, earnings, criminal arrests, substance abuse, and educational achievement), but they tend to be the exception. This general pattern occurs in many diverse areas of health and social policy, as well as other fields in which rigorous studies have been carried out (e.g., medicine, psychology).

II. Why It Matters: Improving social programs is critically needed. The United States has failed to make significant progress in key areas such as –

- **Substance-abuse prevention:** The nation’s most widely-used program – DARE, operating in 75% of U.S. school districts – has been found ineffective in rigorous studies. Meanwhile, government data show that the U.S. has made little overall progress since 1990 in decreasing adolescent use of drugs or alcohol. (DARE is now being re-designed by the DARE organization).
- **Poverty reduction:** The official U.S. poverty rate now stands at 12.6% – slightly *higher* than it stood in 1973. (Alternative measures of poverty based on National Academy of Sciences recommendations show a different rate but a similar trend over time.)

III. The Opportunity: Rigorous studies – including the “gold standard” randomized controlled trial – have identified a few highly-effective social interventions.

Although rare, the very existence of these research-proven interventions suggests that a concerted government effort to build the number of such interventions, and spur their widespread use, could fundamentally improve life outcomes for millions of Americans. Illustrative examples include:

- **Nurse-Family Partnership** – a nurse visitation program for low-income women during pregnancy and children’s infancy (at 15-year follow-up, produces a 40-70% decrease in child abuse/neglect, and arrests/convictions of children and mothers, compared to controls).
- **Life Skills Training** – a low-cost substance-abuse program for junior high students that teaches social and self-management skills (reduces smoking by 20% and serious levels of substance abuse by about 30% by the end of high school, compared to controls).
- **Portland JOBS Training Program** – to move welfare recipients into high-quality, stable jobs through short-term job search and training activities (at 5-year follow-up, increases employment and earnings, and decreases welfare receipt, by 20-25% compared to controls).

IV. Key Barrier to building the number of these proven interventions: The dearth of randomized controlled trials of promising interventions implemented in “real-world” community settings.

Examples of proven effectiveness, such as those above, are rare because well-designed randomized controlled trials – the most scientifically-rigorous impact studies – are uncommon in most areas of social policy. And in instances where such trials have found effective interventions, the interventions have usually been implemented in the controlled conditions of a demonstration project with close researcher involvement. Whether the interventions would remain effective when scaled up and implemented under typical “real-world” community conditions is still unknown.

V. Proposal: That HHS research agencies and social programs *coordinate* efforts to conduct randomized trials to build the number of interventions proven effective in real-world settings.

A. Research agencies on one hand, and health or social programs on the other, each supply a critical piece of what is needed to rigorously evaluate interventions in real-world settings.

- **Research agencies supply the major research funding and expertise needed to carry out randomized controlled trials in key areas of social policy.**

Examples include research agencies such as NICHD, whose mission includes funding research on learning; NIMH and CDC, whose missions include funding research on violence prevention; NIDA and NIAAA, whose missions include funding research on substance-abuse prevention and treatment; and ACF’s Office of Planning, Research and Evaluation, whose mission includes funding research on the economic and social well-being of children and families.

- **Health/Social programs (e.g., in SAMHSA, ACF, HRSA) fund thousands of local service providers whose participation is needed to conduct such trials in real-world community settings.**

Without the participation of the health/social programs, the cost of conducting a randomized controlled trial of an intervention implemented on a large scale in real-world settings can be high – often prohibitively high for a research agency to fund alone. This is because the research agency would need to fund not only the cost of the research, but also the cost of the intervention that is being evaluated at scale.

B. The coordinated initiatives would fund researchers and local service providers to join forces to carry out such trials.

What follows a general illustration of how an HHS research agency and health/social program might collaborate in such an effort:

- **The research agency launches an initiative that funds researchers to partner with local grantees of the health/social program to conduct a randomized trial of a promising intervention** (e.g., substance-abuse prevention strategy) in the grantees’ sites. As discussed above, the trial would preferably be designed to evaluate the intervention under the real-world conditions where it would normally be implemented (e.g., large scale, diverse populations, typical community sites and personnel).
- **The health/social program provides strong incentives for their local grantees (i.e., service providers) to participate in the trial**, including adoption of the promising intervention and participation in the random assignment. As examples, such incentives might include additional grant funds, a competitive priority in grant competitions, or a statement that a service provider’s participation in the trial satisfies all program requirements for evaluation.

Such coordinated initiatives would provide a strong incentive for the researchers on one hand and the local service providers on the other to join forces to evaluate promising social interventions in studies capable of producing strong evidence of effectiveness under real-world conditions. In time, such partnerships could pursue other important questions, including the efficacy of strategies developed in the field, or the evaluation of individual components of comprehensive prevention programs or strategies. These initiatives could be carried out using existing federal funds and statutory authority.

Conclusion: By coordinating existing federal research and program funds, these initiatives could – for the first time – generate the knowledge needed to greatly increase government’s effectiveness in addressing substance abuse, violence, workforce failure, educational failure, and other problems that each year damage the lives of millions of Americans.

Examples of Promising Areas in HHS For Coordinated Initiatives To Carry Out Randomized Evaluations of Promising Social Interventions

Based on our knowledge of both the research literature and the HHS agencies, we offer the following examples of promising areas where coordinated initiatives, as described in this paper, might be piloted. These are intended as illustrative examples to stimulate discussion, rather than as a complete list of possibilities. We recognize that funding cycles and other factors may affect the feasibility of the various examples.

- **Coordination between NIDA and SAMHSA’s Strategic Prevention Framework State Initiative Grant Program (SPF SIG) or SAMHSA’s Drug Free Communities Grant Program.**

SPF SIG provides grants to states to fund community-based strategies for substance abuse prevention. The Drug Free Communities grant program provides grants directly to communities to fund community-based substance abuse prevention efforts. Three promising models for community based substance abuse prevention, funded by SPF SIG or Drug Free Communities grants, are Communities That Care (CTC), PROSPER (Promoting Schools-Community-University Partnerships to Enhance Resilience), and STEP (Steps Toward Effective Prevention). Each model seeks to foster community adoption of evidence-based interventions to prevent drug use. All three models have been tested in randomized controlled efficacy trials conducted by their developers under NIDA funding and have shown positive early effects. However, their effectiveness when implemented on a large scale under less controlled conditions is not yet known. An opportunity exists to test the effectiveness of these models in promoting the successful adoption of evidence-based interventions and reduction of adolescent substance abuse nationwide. NIDA and SAMHSA could coordinate, as described in this paper, to carry out a study in which funded communities under SPF SIG or the Drug Free Communities grant program would be randomly assigned to one of these models, or to a control group, in order to determine the model’s effectiveness in encouraging community adoption of evidence-based interventions, and ultimately in reducing drug use.

- **Coordination between NHLBI and HRSA’s Consolidated Health Centers program, to carry out randomized evaluations of promising school or community-based obesity prevention models.**

Obesity is a major public health issue, and an area where there is a critical need for research-proven prevention models. To build a base of such proven models, NHLBI and HRSA’s Consolidated Health Centers program could undertake a coordinated initiative, as described in this paper, to rigorously evaluate promising obesity prevention models in community or school health centers funded by HRSA.

- **Coordination between NICHD and ACF’s Head Start program, to carry out randomized evaluations of promising early literacy interventions.**

Several early literacy interventions have been found effective in improving reading outcomes when evaluated in small-scale efficacy trials funded by NICHD and other research organizations. NICHD and Head Start could coordinate, as described in this paper, to carry out a randomized controlled trial of one of more of these promising interventions when implemented on a larger scale in typical Head Start centers. If found effective under such conditions, these interventions might then be ready for wide dissemination, with the potential to produce sizeable improvements in reading outcomes of millions of American children from disadvantaged backgrounds.

- **Coordination between NIDA and SAMHSA’s Screening, Brief Intervention, Referral, and Treatment (SBIRT) program, to rigorously evaluate SBIRT’s impact on substance abuse.**

The SBIRT program funds a promising approach to providing early intervention and treatment to persons with substance use disorder. In this approach, medical facilities (i) screen patients to assess severity of substance use, (ii) provide brief intervention focused on increasing insight and motivation to change behavior, and (iii) refer to treatment those identified as needing more intensive services. This approach has never been evaluated in a randomized controlled trial, to determine its impact on substance abuse outcomes. NIDA and SBIRT could undertake a coordinated initiative, as described in this paper, to carry out such a trial.