Identifying and Selecting Evidence-Based Interventions

***Revised* Guidance Document for the Strategic Prevention Framework State Incentive Grant Program**

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Substance Abuse and Mental Health Services Administraiton
Center for Substance Abuse Prevention
www.samhsa.gov

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Executive Summary

The purpose of this guidance is to assist State and community planners in applying the Substance Abuse and Mental Health Services Administration's (SAMHSA's) Strategic Prevention Framework (SPF) to identify and select evidence-based interventions that address local needs and reduce substance abuse problems.

Section I. Summarizes the five steps of SAMHSA's SPF and sets the stage for selecting evidence-based interventions to include in a comprehensive strategic plan.

Section II. Focuses on two analytic tasks included under the SPF: assessing local needs, resources, and readiness to act; and developing a community logic model. Explains the importance of these tasks in community planning to identify the best evidence-based interventions for specific local needs.

Section III. Details how prevention planners can apply the community logic model to determine the conceptual fit or relevance of prevention strategies that hold the greatest potential for affecting a particular substance abuse problem. Also discusses how to examine candidate interventions from the perspective of practical fit or appropriateness for local circumstances, cultural contexts, and populations.

Section IV. Discusses the importance of strength of evidence to inform and guide intervention selection decisions. Presents the three definitions of "evidence-based" provided under the SPF SIG Program and the advantages and challenges of using each one to select prevention interventions. The three definitions of "evidence-based" are as follows:

- Inclusion in Federal registries of evidence-based interventions;
- Reported (with positive effects on the primary targeted outcome) in peer-reviewed journals; or
- Documented effectiveness supported by other sources of information and the consensus judgment of informed experts, as described in the following set of guidelines, *all of which must be met*:

  Guideline 1: The intervention is based on a theory of change that is documented in a clear logic or conceptual model; and

  Guideline 2: The intervention is similar in content and structure to interventions that appear in registries and/or the peer-reviewed literature; and

  Guideline 3: The intervention is supported by documentation that it has been effectively implemented in the past, and multiple times, in a manner attentive to

scientific standards of evidence and with results that show a consistent pattern of credible and positive effects; and

Guideline 4: The intervention is reviewed and deemed appropriate by a panel of informed prevention experts that includes: well-qualified prevention researchers who are experienced in evaluating prevention interventions similar to those under review; local prevention practitioners; and key community leaders as appropriate, e.g., officials from law enforcement and education sectors or elders within indigenous cultures.

Section V. Summarizes the process of working through three considerations that determine the best fit of interventions to include in comprehensive prevention plans:

- Conceptual fit to the logic model: Is the candidate intervention relevant to the targeted problem and outcomes?
- Practical fit to the community's needs and resources: Is it appropriate to the community's population, cultural context, and local circumstances, including community readiness?
- Strength of evidence: Is there sufficient documented effectiveness to support a decision to select the particular intervention and include it in a comprehensive community prevention plan?

Section VI. Discusses the respective roles and expectations for SAMHSA/CSAP and SPF SIG States and their sub-recipient communities, jurisdictions, and Federally recognized tribes and tribal organizations to ensure the identification and selection of best fit, evidence-based prevention interventions for each community.

I. Introduction

A. Background and Context

The Substance Abuse and Mental Health Services Administration (SAMHSA) envisions "a life in the community for everyone" and has as its mission "building resilience and facilitating recovery." SAMHSA strives to achieve its mission through programs supported by three goals: accountability, capacity, and effectiveness. The Center for Substance Abuse Prevention (CSAP) helps to create healthy communities. SAMHSA/CSAP helps States to provide resources and assistance to communities so that communities, in turn, can prevent and reduce substance abuse and related problems. SAMHSA/CSAP also provides training, technical assistance, and funds to strengthen the State prevention systems that serve local communities. SAMHSA/CSAP works with States to identify programs, policies, and practices that are known to be effective in preventing and reducing substance abuse and related problems.

All of SAMHSA's mission and goals are driven by strategic planning to align, manage, and account for priority programs and issues across the three Centers. Chief among SAMHSA's priorities is the Strategic Prevention Framework (SPF)—a five-step planning process to guide the work of States and communities in their prevention activities.

Step 1. *Assess population needs (nature of the substance abuse problem, where it occurs, whom it affects, how it is manifested), the resources required to address the problem, and the readiness to act;*

Step 2. *Build capacity at State and community levels to address needs and problems identified in Step 1;*

Step 3. *Develop a comprehensive strategic plan. At the community level, the comprehensive plan articulates a vision for organizing specific prevention programs, policies, and practices to address substance abuse problems locally;*

Step 4. *Implement the evidence-based programs, practices, and policies identified in Step 3; and*

Step 5. *Monitor implementation, evaluate effectiveness, sustain effective activities, and improve or replace those that fail.*

Throughout all five steps, implementers of the SPF must address issues of cultural competence and sustainability. Cultural competence is important for eliminating disparities in services and programs offered to people of diverse racial, ethnic, and linguistic backgrounds, gender and sexual orientations, and those with disabilities. Cultural competence will improve the effectiveness of programs, policies, and practices selected for targeted populations.

Sustainability of outcomes is a goal established at the outset and addressed throughout each step of the SPF. Prevention planners at both State and local levels need to build systems and institutionalize the practices that will sustain prevention outcomes over time, beyond the life of any specific program.

Under the SPF State Incentive Grant (SIG) Program, prevention planners are specifically required to select and implement evidence-based interventions. SAMHSA/CSAP recognized that this requirement necessitates the availability of a broad array of evidence-based interventions and further must allow prevention planners the flexibility to decide which options best fit their local circumstances. To assist the field in meeting this requirement, SAMHSA/CSAP convened an Expert Workgroup during 2005 to develop recommendations and guidelines for selecting evidence-based interventions under the SPF SIG Program.

The Expert Workgroup was composed of nationally recognized substance abuse prevention experts from a wide spectrum of academic backgrounds and theoretical research perspectives. The guidance presented in this revised document is grounded in the thinking and recommendations of the SAMHSA/CSAP Expert Workgroup and incorporates feedback from the field, including prevention scientists, to clarify guidelines for documented effectiveness and the process for applying them.

B. Purpose of the Guidance

This guidance is directed toward prevention planners working through SPF Steps 3 and 4 and to help them select and implement evidence-based interventions successfully. The guidance lays out an analytic process with a few key concepts to apply in selecting interventions that are conceptually and practically fitting and effective.

II. SPF Implications for Community Planning to Identify and Select Evidence-Based Interventions

A. Local Needs and Resource Assessment: Key Data Tool to Guide Community Planning

Prevention experts agree that substance abuse problems are usually best addressed locally—at the community level—because they are manifested locally. Yet some prevention approaches may be most effective when implemented on a larger scale, perhaps through a statewide change in laws (e.g., change in the alcohol index for driving under the influence). Experts also agree that substance abuse problems are among the most difficult social problems to prevent or reduce. Substance abuse problems require comprehensive solutions—a variety of intervention approaches directed to multiple opportunities.

The challenge of selecting the optimal mix of strategies is complicated by the limited availability of public resources on evidence-based interventions. In practice, practitioners seeking to reduce substance abuse problems will need to put together their own mix of interventions. An optimal mix of interventions will fit the particular needs of the community–its population, cultural context, and unique local circumstances, including community readiness. Some interventions in the comprehensive plan may be deemed "evidence-based" through inclusion in Federal registries or reported findings in the peer-reviewed literature, while others may document effectiveness based on other sources of information and empirical data. An optimal mix of strategies will combine complementary and synergistic interventions.

The needs and resource assessments in Step 1 will guide development of the comprehensive prevention plan, from profiling the problem/population and the underlying factors/conditions that contribute to the problem, to checking the appropriateness of prevention strategies to include in the plan. It is crucial to use local data and information to identify effective strategies that fit local capacity, resources, and readiness. However, finding local data is often difficult. Creative approaches to data sources, including the use of proxy measures and information gleaned through focus groups, may be necessary.

B. The Community Logic Model: Key Conceptual Tool for Community Planning

The community logic model reflects the planning that needs to take place to generate community level change. Building the logic model begins with careful identification or mapping of the local substance abuse problem (and associated patterns of substance use and consequences among the population affected) to the factors that contribute to them. *Developing the logic model starts with defining the substance abuse problem, not choosing the solutions--that is, the programs, practices, or policies already decided upon by States or communities.*

Given that comprehensive plans combine a variety of strategies, it is important to understand the relationships between these problems and the factors or conditions that contribute to them. Few substance abuse problems are amenable to change through direct influence or attack. Rather, they are influenced indirectly through underlying factors that contribute to the problem and its initiation, escalation, and adverse consequences.

These underlying factors include the following:

- *Risk and protective factors* that present themselves across the course of human development and make individuals and groups either more or less prone to substance abuse in certain social contexts.
- *Contributing conditions* and environmental factors implicated in the development of the problems and consequences associated with substance abuse. Examples may include specific local policies and practices, community realities, or population shifts.

Identifying the underlying factors that drive changes in the targeted substance abuse problem and outcomes is essential to determining which programs, practices, and policies will best address that problem and its initiation, progression, and pattern and consequences of use.

Linking the substance abuse problem to the underlying factors, and ultimately to potentially effective prevention strategies, requires analysis and a conceptual tool. The logic model in Figure 1 serves as the conceptual tool to map the substance abuse phenomenon and the factors that drive it.

Figure 1. Community Logic Model, Outcomes-Based Prevention

Logic models lay out the community substance abuse problem and the key markers leading to that problem. They represent systematic plans for attacking local problems within a specific context. The community logic model makes explicit the rationale for selecting programs, policies, and practices to address the community's substance abuse problem. Used in this way, the logic model *becomes an important conceptual tool for planning a comprehensive and potentially effective prevention effort.*

Examples of Community Logic Models

The sample community-level logic models in Figures 1A and 1B illustrate the relationships between an identified substance abuse problem or consequence in an identified population and the salient risk and protective factors/conditions that contribute to the problem. Each risk and protective factor/condition, in turn, highlights an opportunity—or potential point of entry—for interventions that can lead to positive outcomes in the targeted problem.

While different communities may show similar substance abuse problems, the underlying factors that contribute most to them will likely vary from community to community. Communities will tailor the logic model to fit their particular needs, capacities, and readiness to act.

Figure 1A. Community Logic Model for Preventing Alcohol-Involved Traffic Crashes (15- to 24-year-olds)

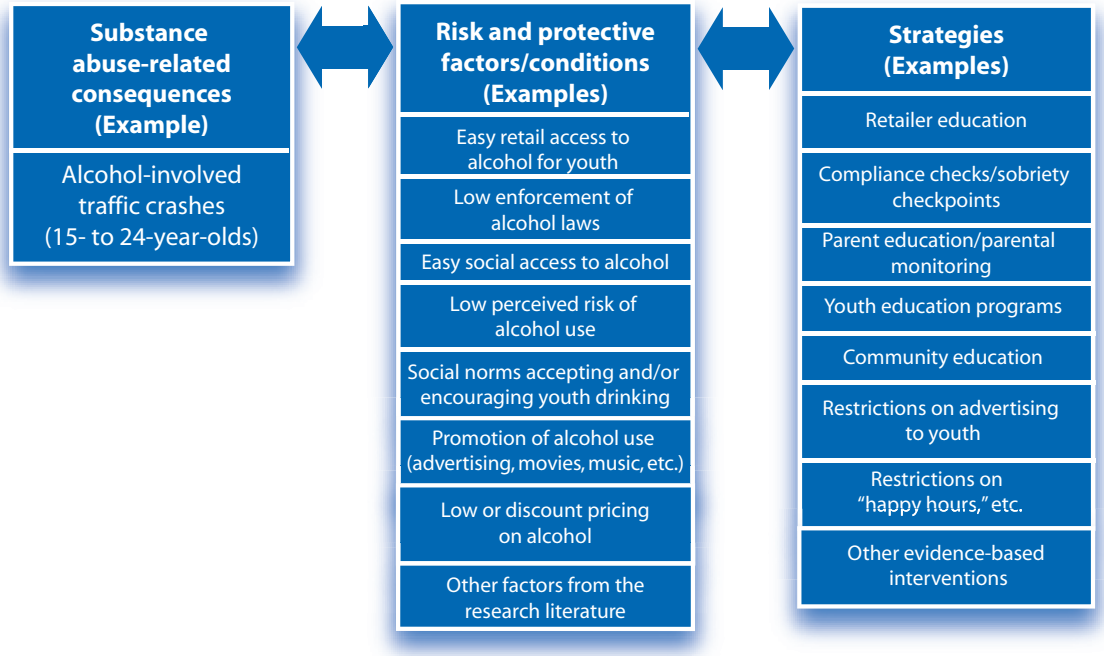
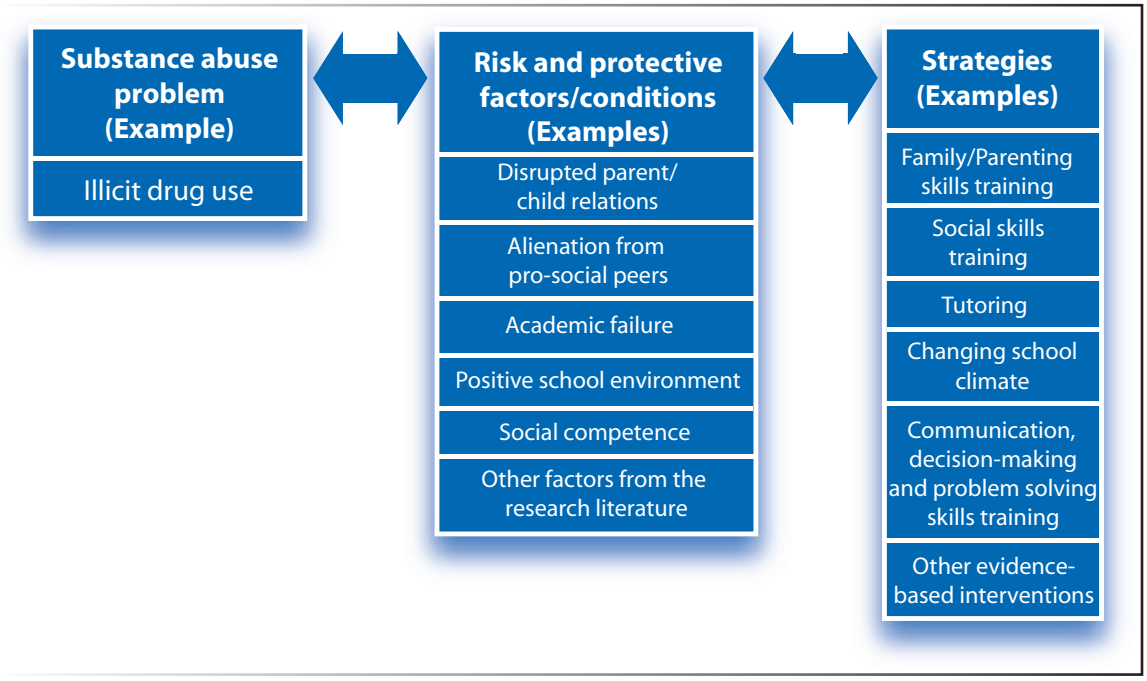


Figure 1B. Community Logic Model for Preventing Illicit Drug Use Among Adolescents



III. Using the Community Logic Model and Assessment Information to Identify Best Fit Interventions

A. Establishing Conceptual Fit: Is It Relevant?

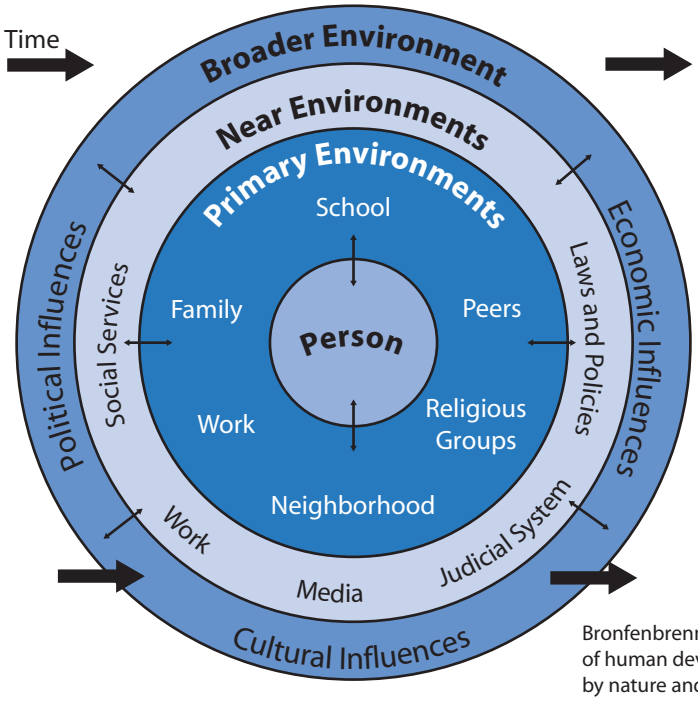
Relevance: If the prevention intervention does not address the underlying risk and protective factors and conditions that drive or contribute to the targeted substance abuse problem, then it is unlikely to produce positive outcomes or changes in that problem.

The community logic model can be used to guide the identification and selection of types of programs, practices, and policies for substance abuse prevention that are relevant for a particular community. Community logic models are tailored to reflect and meet the unique circumstances of a particular community. SAMHSA/CSAP expects SPF SIG States to develop an epidemiological profile and create an initial generic logic model. In turn, each community participating in the program will tailor the generic logic model to its needs.

Because substance abuse problems are complex, multiple factors and conditions will be implicated—some more strongly than others. Communities are encouraged to identify a comprehensive set of interventions directed to their most significant risk and protective factors and conditions and targeted to multiple points of entry. Figure 2 illustrates the Human Environmental Framework, one tool available to guide thinking about multiple points of entry for interventions directed to risk and protective factors across the life span and across social environments as well as to defining points of entry for interventions in different life sectors.

The community logic model can be used to check the conceptual fit of interventions considered for the comprehensive community plan. The logic model screens for the types of interventions most likely to affect positive changes in the targeted substance abuse problem in a particular community, population, and cultural context.

Figure 2. Human Environmental Framework



Bronfenbrenner U. (1979). The ecology of human development: Experiments by nature and design. Cambridge, MA: Harvard University Press.

This figure depicts social environments or spheres of influence in concentric circles that flare outward, moving progressively away from direct influence on the individual toward increasingly indirect influence and advancing over time. A comprehensive intervention plan should identify a mix or layering of interventions that target salient risk and protective factors in multiple contexts across the life span.

B. Establishing Practical Fit: Is It Appropriate?

Appropriateness: If the prevention program, policy, or practice does not fit the community's capacity, resources, or readiness to act, then the community is unlikely to implement the intervention effectively.

A second important concept in selecting prevention interventions is practical fit with the capacity, resources, and readiness of the community itself and the organizations responsible for implementing interventions. Practical fit is assessed through a series of utility and feasibility checks that grow out of the needs and resource assessment and capacity-building activities conducted in SPF Steps 1 and 2.

SAMHSA/CSAP encourages practitioners to use their community assessment findings to judge the appropriateness of specific programs, policies, and practices deemed relevant to

the factors and conditions specified in the community logic model. Below is a list of utility and feasibility checks to consider in selecting prevention strategies.

Utility and Feasibility Checks

Utility Checks

- Is the intervention appropriate for the population identified in the community needs assessment and community logic model? Has the intervention been implemented successfully with the same or a similar population? Are the population differences likely to compromise the results?
- Is the intervention delivered in a setting similar to the one planned by the community? In what ways is the context different? Are the differences likely to compromise the intervention's effectiveness?
- Is the intervention culturally appropriate? Did members of the culturally identified group participate in developing it? Were intervention materials adapted to the culturally identified group?
- Are implementation materials (e.g., manuals, procedures) available to guide intervention implementation? Are training and technical assistance available to support implementation? Are monitoring or evaluation tools available to help track implementation quality?

Feasibility Checks

- Is the intervention culturally feasible, given the values of the community?
- Is the intervention politically feasible, given the local power structure and priorities of the implementing organization? Does the intervention match the mission, vision, and culture of the implementing organization?
- Is the intervention administratively feasible, given the policies and procedures of the implementing organization?
- Is the intervention technically feasible, given staff capabilities, time commitments, and program resources?
- Is the intervention financially feasible, given the estimated costs of implementation (including costs for purchase of implementation materials and specialized training or technical assistance)?

Each of the points in the checklist warrants thoughtful consideration among those involved in planning, implementing, and evaluating the prevention strategies in the comprehensive community plan.

IV. Using Public Resources and Review Processes to Identify Evidence-Based Interventions and Determine Their Evidence Status

Evidence-Based Interventions and Evidence Status

The preceding sections defined logic models and detailed their usefulness in the prevention planning process. This section addresses how those logic models can be translated into action once a problem or set of problems has been identified through the needs-assessment process. Our expectation is that intervention selection is grounded in a well-defined conceptual model (e.g., the community logic model) that includes malleable behaviors, environments, or other factors (referred to as underlying factors in Section II) that can be targeted over the course of development in a variety of contexts. This section presents guidance for selecting interventions from: A. Registries of evidence-based programs; B. The peer-reviewed research literature; and C. Other documentation supporting effectiveness (used in the absence of a registry listing or direct support from the peer-reviewed literature).

The strength of evidence for tested interventions falls along a continuum from strong to weak. Strength of evidence is assessed using established scientific standards and criteria for applying those standards and comprises four major elements:

1. Rigor of the evaluation design (e.g., use of appropriate intervention and control or other comparison groups, group assignment strategy, control of dosage and contextual factors that can provide an alternative explanation of the results or findings).

2. Rigor and appropriateness of the methods used to collect and analyze the data (e.g., use of appropriate data collection designs, use of measures that match outcomes targeted by the intervention, data collection without bias, and use of appropriate statistical tests).

These two elements directly affect the inferences that can be drawn about cause and effect—the degree to which the results obtained from an evaluation can be attributed to the intervention exclusively rather than to other factors.

3. The magnitude and consistency of the effects of the intervention on targeted outcomes. Magnitude refers to the amount of change or impact that an intervention produces for a given outcome—that is, its "effect size." Equally important is consistency in the pattern of positive effects reported on the targeted outcomes.

4. The extent to which findings can be generalized to similar populations and settings. This element refers to the likelihood that the same pattern of positive findings will hold for similar populations under similar conditions.

Taking into account these four methodological elements, strong evidence means that the evaluation of an intervention generates consistently positive results for the outcomes targeted under conditions that rule out competing explanations for effects achieved (e.g., population and contextual differences). Experts agree that evidence for the effectiveness of an intervention becomes "stronger" with replication and field testing under a variety of circumstances. However, there is less agreement about the threshold of evidence or cut-off point below which evidence should be considered insufficient. Ultimately, prevention planners and practitioners must judge the merits of the evidence supporting the selection of one intervention relative to another.

In some cases, planners may not be able to find an intervention that meets their needs in the Federal registries or the peer-reviewed research literature. In these instances, other sources of information such as articles in non-peer-reviewed journals, book chapters, or unpublished program evaluation reports may be available. These sources may provide weaker support for effectiveness; thus, they should be reviewed as specified in the guidelines.

In general, we recommend using the following decision rules when considering these other sources of supporting information:

1. Out of two similar interventions that address the targeted needs equally well, choose the one for which there is stronger evidence of effectiveness, both in terms of the consistency and strength of effects on the desired outcomes and quality or rigor of the evaluation methodology utilized.

2. Reserve the option to select an intervention with little or weak evidence of effectiveness for circumstances in which there are no interventions with stronger evidence that appropriately address the needs identified for a particular population, culture, or local context.

SPF Definitions of Evidence-Based

The SPF SIG Program specifically requires implementation of evidence-based interventions. Evidence-based interventions are defined in the SPF SIG Program by inclusion in one or more of the three categories below:

A. Included in Federal registries of evidence-based interventions;

B. Reported (with positive effects on the primary targeted outcome) in peer-reviewed journals; or

C. Documented effectiveness supported by other sources of information and the consensus judgment of informed experts (as specified in the Guidelines that follow).

Each of the three definitions helps identify interventions appropriate to targeted needs and each has its own advantages and challenges. Prevention planners and practitioners must be prepared to consider the relative adequacy of evidence when deciding to select a particular prevention intervention to include in their comprehensive community plan.

A. Using Federal Registries

Federal registries are readily accessible and easy-to-use public resources for identifying interventions that reduce substance use risk factors and consequences or increase protective factors thought to be associated with reduced potential for substance abuse. Many registries use predetermined criteria and a formalized rating process to assess the effectiveness of interventions reviewed. Some registries apply quality scores to the intervention. These quality scores are indications of the strength of evidence according to the ratings applied. Thus, inclusion of an intervention in a registry can be viewed as providing some evidence of effectiveness. However, the level of evidence required by registries varies considerably. When choosing among interventions that have been reviewed by registries, we generally recommend selecting the one with the highest average score, provided that it demonstrates positive effects on the outcomes targeted for the population identified. Ultimately, while selecting interventions from registries may seem easier in some respects, it still requires planners and practitioners to think critically and make reasoned judgments about intervention selection, taking into account the degree of congruence with the particular cultural context and local circumstances.

Advantages

Federal Registries—

- Provide concise descriptions of the interventions.
- Provide documented ratings of the strength of evidence measured against defined and accepted standards for scientific research.
- Present a variety of practical information, formatted and categorized for easy access and potentially useful to implementers.
- Offer "one-stop" convenience for those seeking quick information on the interventions included.

Challenges

Federal Registries—

- Include a limited number of interventions depending on how they are selected.
- Include interventions most easily evaluated using traditional scientific methods. Consequently, registries include predominantly school- and family-based interventions and relatively few community, environmental, or policy interventions.
- Are based on evidence that may be out of date if the registry does not provide a process for incorporating new evidence.
- May be confusing to consumers seeking to compare the relative strength of evidence for similar programs included on different registries since the criteria and rating procedures may vary from one registry to another.

Federal registries include:

- SAMHSA National Registry of Evidence-Based Programs and Practices (NREPP)

  http://www.nrepp.samhsa.gov

  Provides descriptions of and rates evidence for various interventions related to substance use and abuse and mental health problems.

- OJJDP Model Programs Guide

  http://www.dsgonline.com/mpg2.5/mpg_index.htm

  Provides descriptions of and rates evidence for youth-oriented interventions, many of which are relevant to the prevention of substance use and abuse.

- Exemplary and Promising Safe, Disciplined and Drug-Free Schools Programs Sponsored by the U.S. Department of Education

  http://www.ed.gov/admins/lead/safety/exemplary01/exemplary01.pdf

  Provides descriptions of and rates evidence for educational programs related to substance use.

- Guide to Clinical Preventive Services

  Sponsored by the Agency for Healthcare Research and Quality [AHRQ]

  http://www.ahrq.gov/clinic/cps3dix.htm

  Provides recommendations regarding screening and counseling in clinical settings to prevent the use of tobacco, alcohol, and other substances.

- Guide to Community Preventive Services

  Sponsored by the Centers for Disease Control and Prevention [CDC]

  http://www.thecommunityguide.org

  Provides recommendations regarding generic programs and policies to prevent and reduce tobacco use and alcohol-impaired driving.

- A list of other registries may be found at SAMHSA'S website:

  http://www.samhsa.gov/ebpWebguide/appendixB.asp.

B. Using Peer-Reviewed Journals

The research literature constitutes another primary resource for identifying evidence-based prevention interventions, including those not listed in Federal registries. When the literature is used to determine strength of evidence, all articles relevant to the specific intervention should be considered. In other words, it is not sufficient to garner support for an intervention from a single document selected from a larger body of work. We recommend careful review of all documents that have been published on a particular intervention to ensure that the outcomes reported comprise a consistent pattern of positive effects on the target outcomes.

Unfortunately, using the primary literature is not easy and can be very time consuming and resource intensive, particularly for practitioners without ready access to university libraries or electronic copies of journal articles. Additionally, a healthy degree of skepticism and considerable technical expertise is required to review articles and interpret results, as the quality of the study reported depends on many factors such as the conceptual model or theory on which the intervention is based, the measurement and design strategies used to evaluate it, and the findings that are presented.

Assessing Elements of Evidence Reported in Peer-Reviewed Journals

Listed below are key elements addressed in most peer-reviewed journal articles, along with some questions to consider.

- A defined conceptual model that includes definitions and measures of intermediate and long-term outcomes. Does the article describe the theory or provide a conceptual model of the intervention and link the theory or model to expectations about the way the program should work? Does the article describe the connection of the theory or the conceptual model to the intervention approach, activities, and expected outcomes in sufficient detail to guide your decision?
- Background on the intervention evaluated. How closely does the problem targeted by the intervention match the identified needs of your community? Does the article adequately describe the proposed mechanism of change of the intervention? Are the structure and content of the intervention described in enough detail? Is the context or setting of the intervention described to an extent that allows you to make an informed decision concerning how well it might work in the communities targeted?
- A well-described study population that includes baseline or "pre–intervention" measurement of the study population and comparison or control groups included in the study. Does the article describe in detail the characteristics of the study population and the comparison or control groups used? How well does the study population match your local target group?
- Overall quality of study design and data collection methods. Does the article describe how the study design rules out competing explanations for the findings? Are issues related to missing data and attrition addressed and satisfactorily resolved? Did the study methodology use a combination of strategies to measure the same outcome using different sources (e.g., child, parent, teacher, archival)?
- Analytical plan and presentation of the findings. Does the article specify how the analytical plan addresses the main questions posed in the study? Do the analyses take into account the key characteristics of the study's methodology? Does the article report and clearly describe findings and outcomes? Are the findings consistent with the theory or conceptual model and the study's hypotheses? Are findings reported for all outcomes specified?
- A summary and discussion of the findings. Does the discussion draw inferences and conclusions that are clearly related to the data and findings reported?

Advantages

Peer-Reviewed Journals—

- Typically present detailed findings and analyses that document whether or not the program, practice, or policy has an adequate level of evidence that the intervention works.

- Provide authors' contact information that facilitates further discussion about the appropriateness of the intervention to the target need.
- In some cases, report and summarize meta-analyses and other types of complex analyses (e.g., core components) that examine effectiveness across interventions or intervention components. These types of analyses are potentially very useful to prevention planners.

Challenges

Peer-Reviewed Journals—

- Leave it to the reader to interpret results and assess the strength of the evidence presented and its relevance and applicability to a particular population, culture, or community context.
- Describe in limited detail the activities and practical implementation issues pertinent to the use of the intervention.

C. Using Other Sources for Documenting Effectiveness

When no existing evidence-based interventions are available in registries or the research literature to address the problem, then empirical support for other interventions may be found in unpublished reports (e.g., doctoral theses) or published, non-peer-reviewed sources (e.g., book chapters, evaluation reports, and Federal reviews). We recommend caution when relying on these other sources of support because they usually have not been subjected to the methodological scrutiny provided by registries and peer-reviewed journals. Ultimately, the "burden of proof" for documented effectiveness lies with the program planners and practitioners making the selection decision. Under what conditions is it appropriate to select an intervention that is not included in an established Federal list of evidence-based programs or reported with positive effects in the peer-reviewed journal literature? When no appropriate interventions are available through these primary resources on evidence-based interventions, then prevention planners may need to rely on other, weaker sources of information to identify an intervention that is appropriate for the assessed community need, the population served, and the cultural and community context in which it will be implemented.

When selecting interventions based on other sources of supporting information, *all four of the following guidelines should be met*:

- **Guideline 1:** The intervention is based on a theory of change that is documented in a clear logic or conceptual model;
- **Guideline 2:** The intervention is similar in content and structure to interventions that appear in registries and/or the peer-reviewed literature;

- **Guideline 3:** The intervention is supported by documentation that it has been effectively implemented in the past, and multiple times, in a manner attentive to scientific standards of evidence and with results that show a consistent pattern of credible and positive effects; and
- **Guideline 4:** The intervention is reviewed and deemed appropriate by a panel of informed prevention experts that includes: well-qualified prevention researchers who are experienced in evaluating prevention interventions similar to those under review, local prevention practitioners, and key community leaders as appropriate (e.g., officials from law enforcement and education sectors or elders within indigenous cultures).

These guidelines are intended to assist prevention planners by expanding the array of interventions available to them. In a comprehensive prevention plan, these interventions should be considered supplements, not replacements, for traditional scientific standards used in Federal registry systems or peer-reviewed journals.

Advantages

Other Sources for Documenting Effectiveness —

- Enable State and community planners to consider interventions that do not currently appear on a Federal list or in the peer-reviewed literature but which have the potential to address the problem targeted.
- Provide opportunities for State and community planners to use locally developed or adapted interventions, provided they are supported by adequate documentation of effectiveness.

Challenges

Other Sources for Documenting Effectiveness —

- Place substantial responsibility on prevention planners and practitioners for intervention selection decisions.
- Require prevention planners and practitioners to develop and implement decision-making and documentation processes.
- Require prevention planners and practitioners to assemble additional documentation and assess its adequacy to support using a particular intervention as part of the larger comprehensive community prevention plan.

V. Summary Process Description: Selecting Best Fit Prevention Interventions

The process described here is rooted in the work conducted by local communities during SPF steps 1 and 2. It begins with creating a community logic model to map the local substance abuse picture and draws from the findings of local needs and resource assessment. Prevention planners apply the logic model and assessment findings in a process of thinking critically and systematically about three considerations that determine best fit interventions to include in a comprehensive community prevention plan:

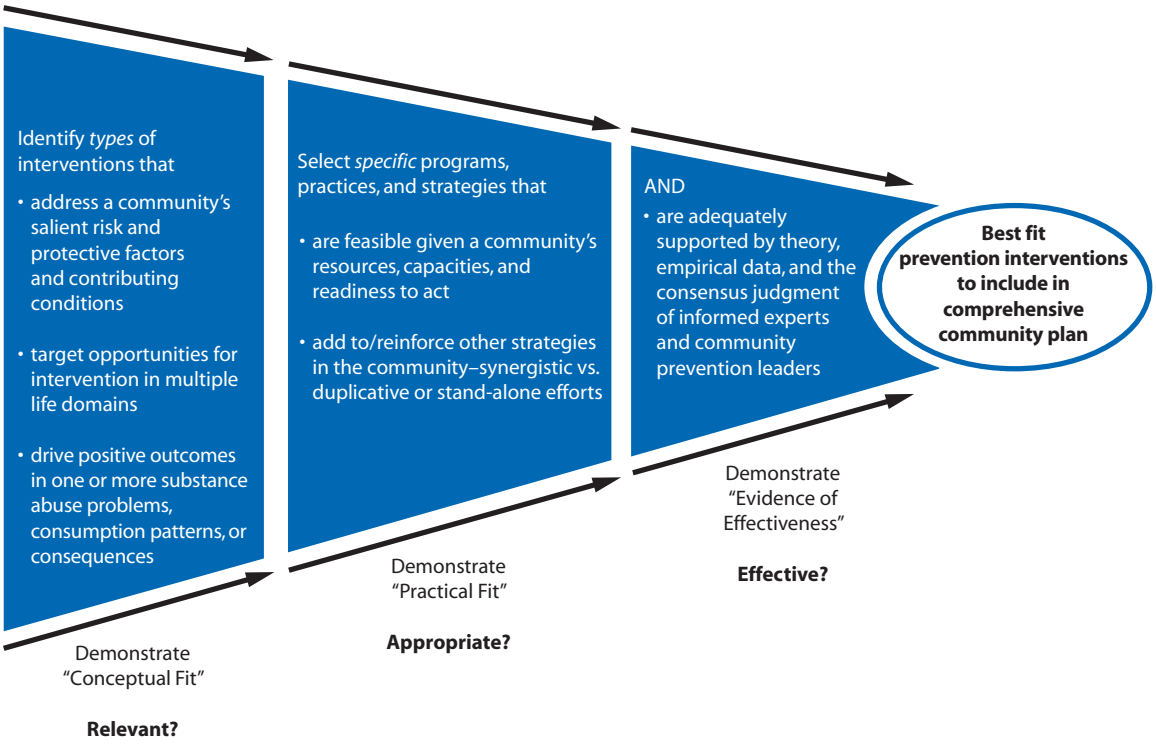
- Conceptual fit with the community's logic model: Does the candidate intervention target the identified problem and the underlying factors that drive or contribute to changes in the problem or outcomes?
- Practical fit with the community's needs, resources, and readiness to act: Is the candidate intervention appropriate for the particular population, cultural context, and set of local circumstances?
- Evidence of effectiveness: Is there sufficient evidence or support for documented effectiveness to select the intervention and include it in the comprehensive community prevention plan?

Figure 3 depicts the process for thinking through these key considerations.

Identify types of programs, practices, and strategies that: target the identified problem, address the relevant underlying factors, target opportunities in multiple life domains.

Select specific programs, practices, and strategies that are: appropriate for the community's population, cultural context, and feasible, given local circumstances, including resources, organizational resources, and readiness to act, and that demonstrate sufficient evidence or support for documented effectiveness.

Figure 3. Process Description: Selecting Best Fit Prevention Interventions



VI. SPF SIG Program Guidance: Roles and Expectations

Collaboration and partnership across all levels—Federal, State, and community or local grantee—are essential for successful and flexible implementation of the guidance provided in this document. The guidance details an analytical process and a few key concepts—what needs to be done to think through the selection of best fit, evidence-based prevention interventions. How this is accomplished will be determined by States and jurisdictions, and will vary from one to another. SAMHSA/CSAP's technical assistance providers are available to work with States and jurisdictions to apply the process and concepts detailed in the guidance.

A. Federal Role

SAMHSA/CSAP will provide leadership and technical assistance to States and jurisdictions and will work with them to strengthen prevention systems in order to improve substance use outcomes and achieve targeted community change.

Expectations

- SAMHSA/CSAP will partner with States to develop and implement a plan that facilitates application of the guidance.
- SAMHSA/CSAP has directed its Center for the Application of Prevention Technologies (CAPT) with its five Regional Expert Teams, to allocate substantial technical assistance resources for States to apply the concepts in this guidance. At the request of States, the CAPT will conduct workshops and activities to help States work with communities to identify and select suitable and effective evidence-based interventions.

B. State/Jurisdiction Role

The role of the States and jurisdictions is to provide capacity-building activities, tools, and resources to communities to foster the development of sound community prevention systems and prevention strategies.

Expectations

- SAMHSA/CSAP expects States funded under the SPF SIG Program to strengthen their infrastructure and capacity to assist communities in identifying and selecting appropriate evidence-based interventions for their comprehensive plans. To assure accountability for this role, SAMHSA/CSAP expects States to establish a technical panel of informed prevention experts that includes: well-qualified prevention researchers who are experienced in evaluating prevention interventions similar to those under review, local prevention practitioners, and key community leaders as appropriate (e.g., officials from law enforcement and education sectors and elders within indigenous cultures). The responsibilities of this technical panel are to: 1) review comprehensive

community plans and the justification for interventions included in each community plan, 2) identify issues and problematic intervention selections to be addressed prior to plan approval, and 3) target technical assistance to work with communities to improve and strengthen their community plans.

- As part of their work, we expect the State-level technical expert panels to assess whether chosen interventions included in the sub-recipient, comprehensive community plans meet one or more of the definitions of "evidence-based" for the SPF SIG Program: included in Federal registries of evidence-based interventions; reported (with positive effects on the primary targeted outcome) in peer-reviewed journals; or documented effectiveness supported by other sources of information and the consensus judgment of informed experts.

In thinking about the implications of this guidance, States should consider the questions below:

> How might the State engage informed experts, including community leaders, in applying the concepts in the guidance for funding comprehensive community plans (programs, practices, and policies) selected by communities?
>
> How might the State communicate its policies regarding funding and implementation of evidence-based programs, practices, and policies to community coalitions and organizations and other key stakeholders?

- SAMHSA/CSAP expects States, with their technical assistance providers, to work closely with communities in identifying and selecting evidence-based interventions. SAMHSA/CSAP and its technical assistance providers will work directly with States on this task.
- SAMHSA/CSAP expects States to develop capacities to assist communities on all key SPF topics, including: assessing needs and resources, using data to detail the substance abuse problem and underlying factors and conditions, building a community logic model, and examining intervention options for relevance and appropriateness.

C. Community Role

The role of SPF SIG sub recipient communities is to develop a comprehensive and strategic community prevention plan based on local needs and resource assessment. Following the steps of the SPF, communities use the findings from these activities to develop a logic model specific to the community and its substance abuse problem. Each community logic model reflects and maps the local substance abuse phenomenon. An effective logic model may serve as the primary tool to guide the selection of evidence-based programs, practices, and policies to include in a comprehensive plan.

Expectations

- SAMHSA/CSAP expects communities to partner with the State and its technical assistance providers, who in turn will partner with SAMHSA/CSAP and CSAP's technical assistance providers.

Concluding Comments

As in all steps of SAMHSA's Strategic Prevention Framework, the application of critical thinking skills is vital to selecting programs, practices, and policies to include in a comprehensive strategic plan. Those selected must be relevant, appropriate, and effective to meet community needs and address the community substance abuse problem. SAMHSA/CSAP and its technical assistance providers welcome the opportunity to partner with SPF SIG States, jurisdictions, and Federally recognized tribes and tribal organizations through technical assistance workshops and "science-to-service" learning communities to think through the selection of best fit, evidence-based prevention interventions.

GLOSSARY

Best fit interventions

Interventions that are relevant to the community logic model (i.e., directed to the risk and protective factors most at play in a community) and appropriate to the community's needs, resources, and readiness to act.

Community logic model

A graphic depiction or map of the relationships between the local substance abuse problem, the risk/protective factors and conditions that contribute to it, and the interventions known to be effective in altering those underlying factors and conditions.

Conceptual fit

The degree to which an intervention targets the community's identified substance abuse problem and the underlying factors that contribute to the problem.

Documented effectiveness

Defined under the SPF SIG Program by guidelines for using other sources of information and support to document intervention effectiveness.

Epidemiological profile

A summary and characterization of the consumption (use) patterns and consequences of the abuse of alcohol, tobacco, marijuana, heroin, cocaine, methamphetamines, inhalants, prescription drugs, or other substances. The epidemiological profile identifies the sources of data on consumption patterns as well as the indicators used to identify consequences (e.g., morbidity and mortality). It should provide a concise, clear picture of the burden of substance abuse in the State using tables, graphs, and words as appropriate to communicate this burden to a wide range of stakeholders.

Evidence-based interventions SPF SIG Program

Evidence-based interventions are defined in the SPF SIG Program by inclusion in one or more of the three categories below:

A. Included in Federal registries of evidence-based interventions;

B. Reported (with positive effects on the primary targeted outcome) in peer-reviewed journals; or

	C. Documented effectiveness supported by other sources of information and the consensus judgment of informed experts (as specified below).
Evidence status or strength	Refers to the continuum of evidence quality, which ranges from weak to strong. Strong evidence means that the positive outcomes assessed are attributable to the intervention rather than to extraneous events, and that the intervention reliably produces the same pattern of positive outcomes in similar populations and contexts.
External validity	The extent to which evaluation outcomes will be achieved in populations, settings, and timeframes beyond those involved in the study; the likelihood that the same pattern of outcomes will be obtained when the intervention is implemented with similar populations and in similar contexts.
Guidelines for Documented Effectiveness SPF SIG Program	**Guideline 1:** The intervention is based on a theory of change that is documented in a clear logic or conceptual model; and **Guideline 2:** The intervention is similar in content and structure to interventions that appear in registries and/or the peer-reviewed literature; and **Guideline 3:** The intervention is supported by documentation that it has been effectively implemented in the past, and multiple times, in a manner attentive to scientific standards of evidence and with results that show a consistent pattern of credible and positive effects; and **Guideline 4:** The intervention is reviewed and deemed appropriate by a panel of informed prevention experts that includes: well-qualified prevention researchers who are experienced in evaluating prevention interventions similar to those under review; local prevention practitioners; and key community leaders as appropriate, e.g., officials from law enforcement and education sectors or elders within indigenous cultures.

Internal validity	The extent to which the reported outcomes can be unambiguously attributed to the intervention rather than to other competing events or extraneous factors.
Interventions	Interventions encompass programs, practices, policies, and strategies that affect individuals, groups of individuals, or entire communities.
Outcomes-based prevention	An approach to prevention planning that begins with a solid understanding of a substance abuse problem, progresses to identify and analyze factors and conditions that contribute to the problem, and finally matches intervention approaches to these factors and conditions that ultimately lead to changes in the identified problem (i.e., behavioral outcomes).
Practical fit	The degree to which an intervention is appropriate for the community's population, cultural context, and local circumstances including its resources, capacities, and readiness to take action.
Protective factors	Conditions for an individual, group, or community that decrease the likelihood of substance abuse problems and buffer the risks of substance abuse.
Risk factors	Conditions for an individual, group, or community that increase the likelihood of a substance abuse problem.

A Life in the Community for Everyone

SAMHSA

Substance Abuse and Mental Health Services Administration

U.S. Department of Health and Human Services

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