Identifying and Selecting Evidence-Based Interventions

Guidance Document for the Strategic Prevention Framework State Incentive Grant Program
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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 substance abuse problem. Also discusses how to examine candidate interventions from the perspective of practical fit or appropriateness for local circumstances, contexts, and populations.

Section IV. Discusses the importance of strength of evidence in determining whether specific interventions work. Presents the three definitions of “evidence-based” status provided under the SPF SIG Program and the challenges of using each one to select prevention interventions. The three definitions of “evidence-based” status are as follows:

- Inclusion in a Federal List or Registry of evidence-based interventions;
- Being reported (with positive effects) in a peer-reviewed journal; or
- Documentation of effectiveness based on the guidelines listed below.

During 2005, SAMHSA/Center for Substance Abuse Prevention (CSAP) convened an Expert Workgroup to develop recommendations for evidence-based programming and guidelines to define documented effectiveness under the SPF SIG Program. Based on the recommendations of the Expert Workgroup, SAMHSA/CSAP recommends three guidelines for evidence—*all of which need to be demonstrated*—to document the effectiveness of complex or innovative interventions developed locally for a specific population and context. Taken together, the evidence guidelines for documented effectiveness are the following:

**Guideline 1:** The intervention is based on a solid theory or theoretical perspective that has been validated by research;

**Guideline 2:** The intervention is supported by a documented body of knowledge—a converging of empirical evidence of effectiveness—generated from similar or related interventions that indicate effectiveness; and
**Guideline 3:** The intervention is judged by a consensus among informed experts to be effective based on a combination of theory, research and practice experience. “Informed experts” may include key community prevention leaders, and elders or other respected leaders 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 it relevant?
- Practical fit to the community’s needs and resources: Is it appropriate?
- Strength of evidence: Is it effective?

**Section VI.** Discusses the respective roles and expectations for SAMHSA/CSAP and SPF SIG States and their subrecipient 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 document is grounded in the thinking and recommendations of the SAMHSA/CSAP Expert Workgroup.

**B. Purpose of the Guidance**

This guidance is directed to prevention planners working through SPF Steps 3 and 4 and to help them successfully select and implement evidence-based interventions. 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. The mix of interventions will need to fit the capacity, resources, and readiness of the community and its participating organizations. Some interventions in the comprehensive plan will demonstrate evidence of effectiveness using scientific standards and research methodologies, while others will demonstrate effectiveness based on less standardized or customized assessment. An optimal mix of strategies will combine complementary and synergistic interventions drawn from different resources and based on different types of evidence.

The needs and resource assessments in Step 1 will guide development of the comprehensive 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) 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.
Since 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 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** 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 risk and protective factors is central to determining the most promising strategies—programs, practices and policies—for addressing a substance abuse problem and its initiation, progression, frequency/quantity of use, 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 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)
Risk and protective factors/conditions
(Examples)

- Disrupted parent/child relations
- Alienation from pro-social peers
- Academic failure
- Positive school environment
- Social competence
- Other factors from the research literature

Strategies
(Examples)

- Family/Parenting skills training
- Social skills training
- Tutoring
- Changing school climate
- Communication, decision-making and problem solving skills training
- Other evidence-based interventions

Figure 1B. Community Logic Model for Preventing Illicit Drug Use
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 program, policy, or practice doesn’t address the underlying risk and protective factors/conditions that contribute to the problem, then the intervention is unlikely to be effective in changing the substance abuse problem or behavior.*

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/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, and defining points of entry for interventions in different life sectors.

*The community logic model can be used to check the conceptual fit of interventions to include in the comprehensive community plan.* The logic model screens for the most appropriate types of interventions for a particular community.
Identifying and Selecting Evidence-Based Interventions

B. Establishing Practical Fit: Is It Appropriate?

Appropriateness: *If the prevention program, policy, or practice doesn’t 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/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 and 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/Review Processes to Identify Evidence-Based Interventions and Determine Their Evidence Status

Evidence-Based Interventions and Evidence Status

Experts in the field agree that the nature of evidence is continuous. The strength of evidence or “evidence status” of tested interventions will fall somewhere along a continuum from weak to strong. Strength of evidence is traditionally assessed using established scientific standards and criteria for applying these standards. Strength of evidence comprises three major elements:

- Rigor of the study design (e.g., use of appropriate comparison and control groups; time series design).

- Rigor and appropriateness of the methods used to collect and analyze the data (e.g., whether data were collected in an unbiased manner and the statistical tests were appropriate).

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.

- The extent to which findings can be generalized to similar populations and settings. This element refers to the likelihood that the same findings will be obtained if the intervention is repeated in similar circumstances.

Strong evidence means that the intervention “works”—that it generates a pattern of positive outcomes attributed to the intervention itself, and that it reliably produces the same pattern of positive outcomes for certain populations under certain conditions.

Experts agree that evidence becomes “stronger” with replication and field testing in various circumstances. However, experts do not agree on a specific minimum threshold of evidence or cutoff point below which evidence should be considered insufficient. Nor do they agree whether little evidence is equivalent to no evidence at all. Even evidence from multiple studies may still be judged insufficient to resolve all doubts about the likely effectiveness of an intervention designed for a different population or situation.

This discussion takes us to the role of professional judgment and the application of critical thinking skills to determine overall best fit of interventions to include in a comprehensive community plan. Strength of evidence is critical to selecting interventions that are likely to work, but it is not the sole consideration. Keep in mind two practical criteria:
1. Out of two interventions, choose the one for which there is stronger evidence of effectiveness, if the intervention is similar, equivalent, and equally well-matched to the community’s unique circumstances.

2. Reserve selecting an intervention with little or weak evidence of effectiveness for situations in which other interventions with stronger evidence do not fit local circumstances.

**SPF Definitions of Evidence-Based Status**

The SPF SIG Program specifically requires implementation of evidence-based interventions. Evidence-based interventions are defined in the SPF SIG Program by inclusion under one or more of three public resources/review mechanisms that rate, make judgments, or provide information about the strength of evidence supporting specific interventions. These definitions or resource mechanisms are as follows:

- Included on Federal Lists or Registries of evidence-based interventions;
- Reported (with positive effects) in peer-reviewed journals; or
- Documented effectiveness based on the three new guidelines for evidence.

Each of the three definitions helps identify evidence-based interventions and each presents its own advantages and challenges.

Regardless of the resource or review process, consumers must be prepared to think critically about the adequacy of evidence for interventions deemed relevant (conceptual fit) in the logic model and appropriate (practical fit) for real-world implementation.

**A. Using Federal Lists or Registries**

Federal Lists or Federal Registries are readily accessible and easy-to-use public resources. Historically, most Federal Lists or Registries are limited in scope since they are geared to interventions most amenable to assessment using traditional research designs and methodologies for evaluation. These interventions typically share certain characteristics:

- Discrete in scope;
- Guided by curricula or manuals;
- Implemented in defined settings or organized contexts; and
- Focused primarily on individuals, families, or defined settings.
Advantages

Federal Lists and Registries—

• Provide concise descriptions of discrete interventions;
• Provide documented ratings of strength of evidence measured against defined and generally accepted standards for scientific research;
• Present a variety of practical information, formatted and categorized for easy access, and potentially useful to implementers; and
• Offer “one-stop” convenience for those seeking quick information on certain types of interventions.

Challenges

Federal Lists and Registries—

• Include a limited number of interventions. Not all those eligible choose to apply. Also, the availability of funding may limit the number of interventions that can be reviewed and included in a Registry at any given time;
• Include the types of interventions most easily evaluated using traditional scientific standards and research methodologies. Historically, this has resulted in an overrepresentation of school-based and individual-focused interventions and an underrepresentation of environmental and community-based interventions;
• Use review criteria that emphasize the importance of internal validity (attribution of results to the intervention only) over external validity (ability to generalize to other populations, contexts, and real-world situations); and
• Confer misleading “global effectiveness labels” based on arbitrary cutoff points along an evidence continuum (sometimes with minuscule differences between those included in a particular category and those excluded) and often overgeneralize outcomes not measured in the study.

SAMHSA’s National Registry of Evidence-Based Programs and Practices (NREPP) is a decision support system designed to help stakeholders (including States and community-based organizations) select interventions. The NREPP reflects current thinking that States and communities are best positioned to decide what is most appropriate for their needs.

Scheduled to be up and running early in calendar year 2007, SAMHSA’s new NREPP will be available to local prevention providers and decision makers seeking to identify interventions that produce specific community outcomes. Reconceptualized as a decision-support tool, the new NREPP
represents a significant policy accommodation by SAMHSA on behalf of decision makers needing a more diverse set of options to address broader community problems.

Key points about NREPP are as follows:

- NREPP is a voluntary rating and classification system designed to provide the public with reliable information on the scientific basis and practicality of interventions that prevent and/or treat mental and substance use disorders.

- Outside experts will review and rate interventions on two dimensions: strength of evidence and dissemination capability. Strength of evidence is defined and assessed on six criteria; readiness for dissemination is defined and assessed on three criteria. Each criterion will be numerically rated on an ordinal scale ranging from zero to four.

- For all interventions reviewed, detailed descriptive information and the overall average rating score on each dimension (regardless of the rating score) will be included and posted on the NREPP Web site. Average scores achieved on each rating criterion within each dimension will also be available on the NREPP Web site (www.nrepp.samhsa.gov).

- NREPP allows a broader range of evaluation research designs to be eligible for review, including single group pre/posttest design without comparison or control data. However, to encourage the submission of interventions likely to receive strong reviews (i.e., those that demonstrate strength of evidence), NREPP establishes three minimum or threshold requirements that must be met:

  1. The intervention demonstrates one or more positive changes (outcomes) in mental health and/or substance use behavior among individuals, communities, or populations;

  2. Intervention results have been published in a peer-reviewed publication or documented in a comprehensive evaluation report; and

  3. Documentation (e.g., manuals, process guides, tools, training materials) of the intervention and its proper implementation is available to the public to facilitate dissemination.

In addition to the threshold evidence requirements, NREPP will award “priority review points” for quality of study design and for outcomes in designated content areas. Priority points increase the potential for qualifying applications to be selected for review. Interventions will receive one priority point if they have been evaluated using a quasi-experimental or experimental study design, including a pre/post design with comparison or control group, or longitudinal/time series design with a minimum of three data points, one of which must be a baseline assessment.
B. Using Peer-Reviewed Journals

Peer-reviewed journals present findings about what works and what does not. The burden for determining the applicability and credibility of the findings falls on the reader.

Advantages

*Peer-reviewed journals—*

- Preview new and emerging prevention strategies; highlight a program, practice, or local policy initiative for further follow-up directly with the intervention developer/implementer;
- Report and summarize meta-analyses and other types of complex analyses (e.g., core components) that examine effectiveness across interventions or intervention components; and
- Present detailed findings and analyses that illuminate whether or not and how an intervention works.

Challenges

*Peer-reviewed journals—*

- Leave it to the reader to assess the credibility of evidence presented and its relevance and applicability to the community;
- Describe in limited detail the activities and implementation issues pertinent to dissemination; and
- Emphasize the importance of internal validity (attribution of results to the intervention) over external validity (generalizability to different populations and contexts).

Assessing Elements of Evidence Reported in Peer-Reviewed Journals

Using the primary research literature to identify potential prevention interventions requires critical assessment of the quality of the research presented and the conceptual model on which it is based. Listed below are key elements addressed in most peer-reviewed journal articles along with some question probes. Critical consumers of information presented in peer-reviewed journals should be prepared to read each article at least twice.

- *Background on the intervention evaluated in the study.* Does the article adequately set the stage for the study and describe why the study was undertaken? Does it adequately describe the intervention? The characteristics of the populations involved in the study? The context or setting of the intervention? How closely does the objective of the study reflect the needs of your community?
• A defined conceptual model that includes definitions and measures of intermediate and long-term outcomes. Does the article describe the theory base of the intervention and link the theory to expectations about the way the program works and specific outcomes expected? Does the article describe the connection of theory to intervention approach and activities, and to expected outcomes, in sufficient detail to guide your implementation?

• A well-described study population that includes baseline or “pre” measurement of the study population and comparison or control groups included in the study. Does the article describe the characteristics of the study population and comparison/control groups? How well does the study population match your local target group? How are they similar or different?

• Overall quality of study design and data collection methods. Does the overall study design adequately rule out competing explanations for the findings? Did the data collection methods account for participant attrition? Missing data? Data collector bias and selection bias? Did the study methodology use a combination of strategies to measure the same outcome using different sources (converging evidence)? Is the overall study design sufficiently robust to show that the intervention worked?

• Analytic plan and presentation of the findings. Does the analytic plan address the questions posed in the study? Does the article report and clearly describe findings/outcomes and do they track with what was expected?

• A summary and discussion of the findings. Does the discussion draw inferences and conclusions that are appropriate and grounded in the findings and strength of the overall study design?

C. Using Guidelines for Documented Evidence of Effectiveness

Some complex interventions, which usually include innovations developed locally, look different from most of those in Federal Lists and Registries. Because complex interventions exhibit qualities different from those of discrete and manualized interventions, they may require customized assessment. Complex interventions may exhibit certain characteristics that make them difficult to evaluate and measure:

• A multifaceted approach with interacting components;

• Inclusive outreach across populations and settings—targeting heterogeneous groups of participants, spanning a range of settings, and extending across multiple levels of organization;

• A philosophy that values adaptation in response to unique community needs and opportunities;
• Reliance on the involvement of committed individuals who provide informal services that go beyond those planned; and

• A flexible intervention design that responds readily to unpredictable and changing community circumstances.

SPF SIG Program Guidelines for Documented Effectiveness

The SAMHSA/CSAP Expert Workgroup recommended taking a broad view toward judging the adequacy of evidence for complex interventions. It recommended using different types or streams of evidence, drawing from traditional research-designed evaluation studies as well as accumulated local empirical data, established theory, professional experience, and indigenous local knowledge and practitioner experience.

Central to the Expert Workgroup’s recommendations is the concept of blending—combining multiple streams of evidence to support an optimal mix of interventions to include in a comprehensive community plan.

The Expert Workgroup recognized that evidence provided as support for community-based interventions must reflect certain characteristics to be credible and persuasive. These characteristics are captured in three guidelines for evidence all of which must be met to demonstrate “documented effectiveness” under the SPF SIG Program:

**Guideline 1:** The intervention is based on a solid theory or theoretical perspective that has been validated by research;

**Guideline 2:** The intervention is supported by a documented body of knowledge—a converging accumulation of empirical evidence of effectiveness—generated from similar or related interventions that indicate effectiveness; and

**Guideline 3:** The intervention is judged by a consensus among informed experts to be effective based on a combination of theory, research, and practice experience. Informed experts may include key community prevention leaders, and elders or other respected leaders within indigenous cultures.

*These guidelines are intended to expand the array of interventions available to prevention planners; they are considered supplements, not replacements, for traditional scientific standards in Federal evidence-rating systems or peer-reviewed journals.*

Communities are encouraged to use as many types of documentation as possible to justify selecting a particular complex, evidence-based intervention.

Notice that these guidelines do not specify a minimum threshold level of evidence of effectiveness. They rely instead on professional judgment to determine the adequacy of evidence to meet these three guidelines when considered in the broader context of the comprehensive community plan.
Advantages

*Guidelines for documented evidence of effectiveness*—

- Enable State and community planners to diversify the portfolio of strategies incorporated in a comprehensive plan; ensure flexibility for those making programming decisions;
- Empower State and community planners to select or develop innovative, complex interventions to meet the needs of individual communities;
- Create the potential for using culturally based evidence as well as traditional evidence to support local decisions; and
- Authorize State and community planners to exercise professional judgment in deciding the potential contribution of unique intervention components in the comprehensive plan.

Challenges

*Guidelines for documented evidence of effectiveness*—

- Place substantial responsibility on prevention planners for intervention selection decisions. The guidelines are new and are neither simple nor simplistic; and
- Require prevention planners to think critically about the evidence provided to support the inclusion of a particular intervention in the community’s comprehensive plan.

Examples of Evidence to Support Documented Effectiveness

Several types of evidence may be used to support documented effectiveness as defined under the SPF SIG Program. Documentation is important to justify the inclusion of a particular intervention in a comprehensive community plan. Prevention planners are encouraged to provide as many types of documentation as are appropriate and feasible in order to provide strong justification of documented effectiveness. The following are types of documented evidence that may be used to demonstrate documented effectiveness:

- Documentation that clarifies and explains how the intervention is similar in theory, content, and structure to interventions that are considered evidence-based by scientific standards.
- Documentation that the intervention has been used by the community through multiple iterations, and data collected indicating its effectiveness.
- Documentation that indicates how the proposed intervention adequately addresses elements of evidence usually addressed in peer-reviewed journal articles. These elements may include the nature and quality of the evaluation research design; the consistency of findings across multiple studies; and the nature and quality of the data collection methods, including attention to missing data and possible sources of bias.
• Documentation that explains how the proposed intervention is based on an established theory that has been tested and empirically supported in multiple studies. This documentation should include an intervention-specific logic model that details how the proposed intervention applies and incorporates the established theory.

• Documentation that explains how the proposed intervention is based on published principles of prevention. This documentation should provide references for the principles cited and should explain how the proposed intervention incorporates and applies these principles.

• Documentation that describes and explains how the intervention is rooted in the indigenous culture and tradition.
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 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 plan:

- Conceptual fit with the community’s logic model (is it relevant?);
- Practical fit with the community’s needs, resources, and readiness to act (is it appropriate?); and
- Evidence of effectiveness (is it effective?).

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

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 in this document. The guidance details an analytic 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, with its technical assistance providers, will work with States to develop their system capacities to support communities in selecting interventions. To this end, SAMHSA/CSAP has directed its five regional Centers for the Application of Prevention Technologies (CAPTs) to allocate substantial technical assistance resources for States to apply the concepts in this guidance. At the request of States, CAPTs 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 evidence-based interventions for their comprehensive plans. To accomplish this, SAMHSA/CSAP expects States to establish a mechanism (e.g., technical expert panel) to assure accountability for: reviewing comprehensive community plans and the justification for interventions included in the plan; identifying issues and problematic intervention selections; and targeting technical assistance to work with communities to improve and strengthen their community plans.
In thinking about the implications of this guidance, States may want to consider the questions below:

How might your 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 your communities?

How might your 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 subrecipient 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 risk and protective factors that contribute to or influence the identified community substance abuse problem.

**Documented effectiveness**  
Defined under the SPF SIG Program by guidelines for evidence to demonstrate intervention effectiveness. These guidelines include grounding in solid theory, a positive empirical track record, and the consensus judgment of informed experts and community prevention leaders.

**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**  
Interventions based on a strong theory or conceptual framework that comprise activities grounded in that theory or framework and that produce empirically verifiable positive outcomes when well implemented.

**Evidence-based status—SPF SIG program**  
Defined by inclusion through one or more of three public resources or review processes that make judgments and provide information about the strength of evidence for intervention selections:
• Included on Federal Lists or Registries of evidence-based interventions;
• Reported (with positive outcomes) in peer-reviewed journals; or
• Documented effectiveness based on guidelines developed by SAMHSA/CSAP.

**Evidence status or strength of evidence**

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 extraneous events and that the intervention reliably produces the same pattern of positive outcomes in similar populations and contexts. Strong evidence means that the intervention works.

**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.

**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/conditions that contribute to the problem, and finally matches intervention approaches to these factors/conditions ultimately leading to changes in the identified problem, i.e., behavioral outcomes.

**Practical fit**

The degree to which an intervention meets the resources and capacities of the community and coincides with or matches the community’s 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.