



SAMHSA's Center for the Application of
Prevention Technologies

Building the Evaluation Capacity of Local Programs Serving American Indian/Alaska Native Populations: Lessons Learned

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Acknowledgments

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Building the Evaluation Capacity of Local Programs Serving American Indian/Alaska Native Populations: Lessons Learned

Executive Summary

SAMHSA's Center for the Application of Prevention Technologies (CAPT) provides training and customized evaluation technical assistance designed to strengthen the evaluation capacity of locally-developed and innovative substance abuse prevention programs that serve American Indian and Alaska Native (AI/AN) communities. This intensive and staged training and technical assistance, known as the Service to Science initiative, uses multiple methods—including assessment of evaluation needs, evaluation basics training, face-to-face diagnostic consultations, follow-up assistance/evaluation coaching, distance learning on advanced evaluation topics, and financial incentives (subcontracts)—to help selected organizations provide more credible evidence of program effectiveness in addressing health disparities in substance abuse.

Thirty-four programs serving AI/AN populations participated in Service to Science from FY2010 to FY2014. The majority of these programs served AI/AN adolescents, with some of those also serving younger children and/or young adults. The most common risk factor addressed was the impact of historical trauma on tribal communities; the most commonly addressed protective factor was cultural connectedness. All programs aimed to reduce or prevent substance abuse, with 30 also addressing substance abuse consequences. Of greatest concern was the link between substance abuse and suicide, with ten of the 30 programs targeting suicidal behaviors.

Twenty of the participating programs successfully applied for subcontracts to fund additional evaluation enhancement activities. Major impacts included the following: (1) development of new or enhanced existing evaluation tools and data collection procedures, which increased programs' ability to measure change; (2) leveraging evaluation enhancements into additional funding and/or recognition; (3) increased capacity to implement evaluation activities in the future, and in more settings; and (4) increased sensitivity to evaluation ethics.

A number of factors facilitated evaluation capacity building with tribal populations, including expertise and accessibility of culturally competent technical assistance providers, time dedicated to building strong program-provider relationships, emphasis on qualitative data, use of culturally responsive evaluation methods and tools, support for innovation and productive adaptation of evidence-based strategies, respect for circular (vs. linear) logic models or views on change, understanding of tribal political processes, and a focus on strengths-based vs. risk-based programming.

Major challenges to evaluation capacity building included time constraints, difficulty recruiting participants, staff turnover/availability, limited program funding, methodological issues, limited access/availability to data, scarce resources, and difficulty partnering with other organizations.

Introduction

In its seminal strategic planning report *Leading Change: A Plan for SAMSHA's Roles and Actions 2011-2014*, SAMHSA recognizes the behavioral health disparities evident in American Indian and Alaska Native (AI/AN) communities, with an emphasis on suicide and substance use disorders. Related to these disparities are significant risk factors for behavioral health problems, including historical trauma and poverty. SAMHSA, furthermore, highlights a priority to provide capacity-building technical assistance to tribal governments and providers that address these disparities and risk factors. Consistent with this priority, SAMHSA's Center for the Application of Prevention Technologies (CAPT), through its implementation of the Service to Science initiative, provided training and customized evaluation technical assistance to locally-developed and innovative substance abuse prevention programs that serve AI/AN communities so that they can provide more credible evidence of program effectiveness in addressing health disparities in, risk or protective factors for, and consequences of substance abuse.

As this brief report will describe, SAMHSA's Service to Science initiative made major strides in meeting the evaluation needs of 34 tribal communities served over the past five years. Programs serving AI/AN communities demonstrated major gains in strengthening their evaluation capacities to better demonstrate evidence of effectiveness. The CAPT's intensive, layered, and customized approach worked well in demystifying and assisting in the application of evaluation methods. See Appendix A for a summary of methods used to prepare this report.

Implementing an Intensive, Layered Approach

Service to Science was a national initiative for locally-developed and innovative prevention programs interested in demonstrating more credible evidence of effectiveness. Established by SAMHSA's Center for Substance Abuse Prevention (CSAP), its long-range purpose was twofold: (1) to increase the pool of effective prevention interventions from which states and communities can select to address substance abuse; and (2) to support innovative local programs seeking to strengthen their capacity to demonstrate and document evidence of effectiveness.

Service to Science combined multiple methods to build evaluation capacity, including readiness/evaluability assessment, foundational training on evaluation basics, face-to-face diagnostic consultations, follow-up assistance and coaching, and distance learning on advanced evaluation topics. Through these methods, program representatives received information and tools to help them improve their evaluation efforts. By working closely with their assigned programs, Service to Science technical assistance providers played key roles in helping participants meet their aims.

Every year, Single State Agencies and/or National Prevention Network representatives nominated a new cohort of participating programs. These programs then participated in regional training and technical assistance events (or academies) and received follow-up technical assistance tailored to meet their individual evaluation needs. Pending the availability of funds, participating programs also had the opportunity to compete for a one-year mini-subcontract to be used to enhance their evaluation capacity (more on this below).

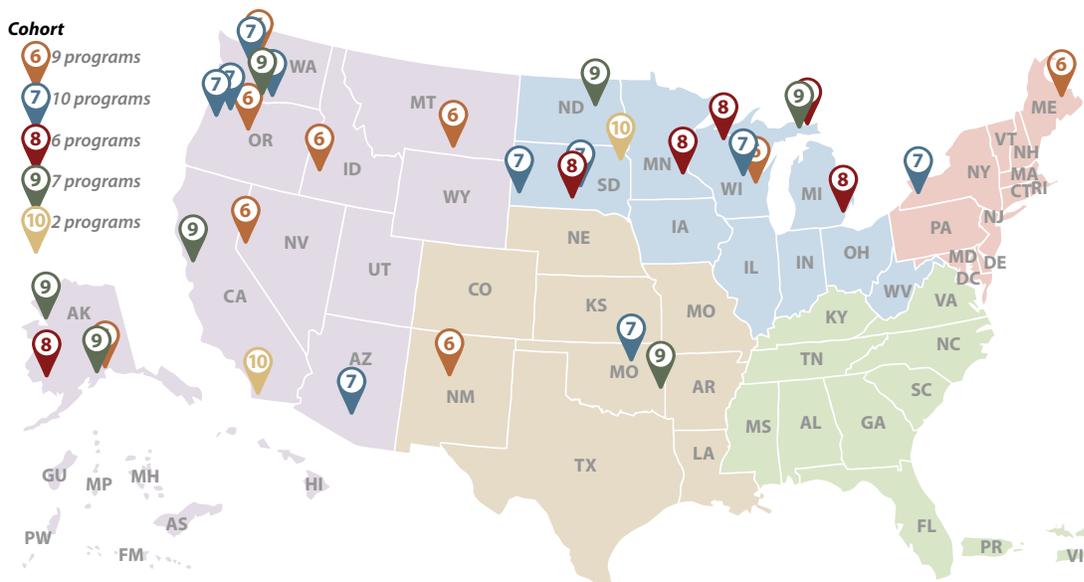
The Native American Service to Science initiative was an expansion of Service to Science, dedicated to reaching programs developed by and for AI/AN peoples. Similar to the Service to Science initiative, programs received customized and intensive assistance and guidance on program evaluation. Both initiatives also shared SAMHSA/CSAP's goals and were dedicated to building evaluation capacity. However, unlike the general Service to Science initiative, SAMHSA's Native American Center for Excellence or, more recently, Tribal Training and Technical Assistance Center Expert Panel, rather than a Single State Agency, nominated Native American programs for participation in the Native American Service to Science initiative.

At the conclusion of the technical assistance phase, programs participating in both Service to Science and the Native American Service to Science initiative¹ had the opportunity to competitively apply for subcontract funding to further enhance their evaluation efforts. Each year the CAPT, on behalf of SAMHSA, awarded between 22 and 25 subcontracts, with five awards per cohort set aside exclusively for participants in the Native American Service to Science initiative.

Addressing Diverse Substance Abuse Prevention Priorities

Thirty-four programs serving AI/AN populations participated in Service to Science from FY2010 to FY2014. Of these 34, 22 were recruited and selected, in collaboration with the CAPT, by SAMHSA's Native American Center for Excellence, and later the new Tribal Training and Technical Assistance Center, for participation in the Native American Service to Science initiative. These programs operated in a variety of settings, served a range of populations, addressed a wide range of factors and substance-related consequences, and implemented many different types of prevention strategies.

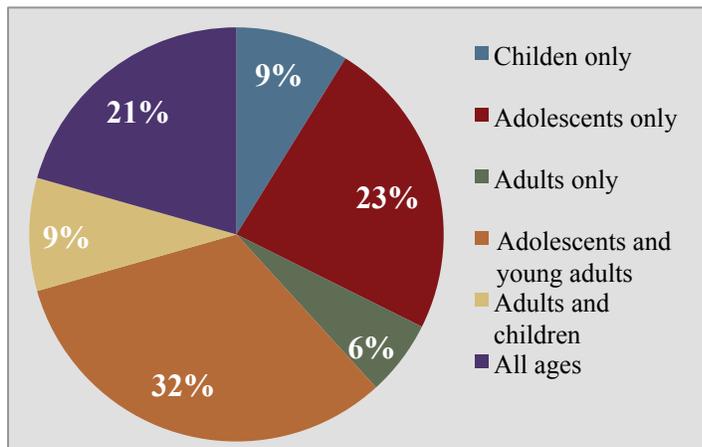
Figure 1. Location of FY2010-FY2014 Service to Science AI/AN programs (N=34)



¹ With the exception of FY2014 participants.

Settings Where Programs Were Implemented. Roughly half of the programs served were implemented across two or more tribal communities, reservations, or counties. Approximately one quarter of the remaining programs were situated in one reservation or tribal community, with another quarter situated in urban communities. As one might expect, types of implementation settings (e.g., schools, healthcare, faith-based, social service) were varied, with school-based programs the most common at roughly one quarter of the programs served. From a CAPT service area perspective, seventeen (50%) of the programs were located in the CAPT’s west service area, twelve (35%) in the central service area, three (9%) in the southwest service area, and two (6%) in the northeast service area. See Figure 1 and Appendix B.

Figure 2. Percent of FY2010-FY2014 Service to Science AI/AN programs by age group served (N=34)



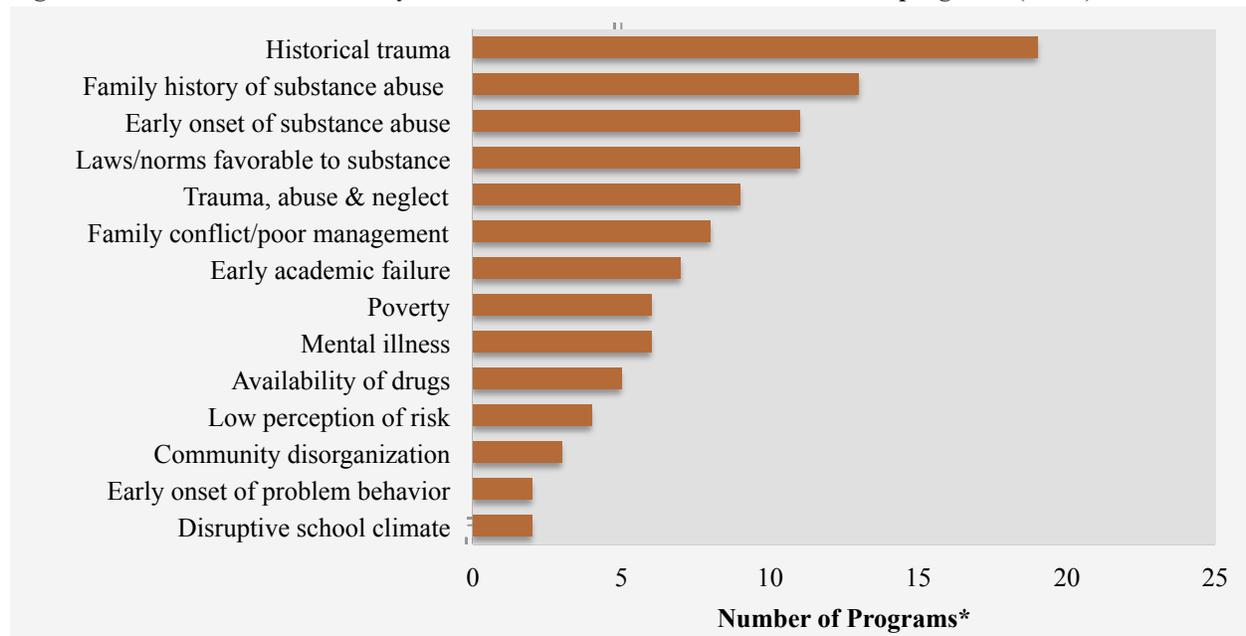
Populations Served. Twenty-three of the programs served AI/AN adolescents, with some of those also serving younger children and/or young adults. See Figure 2 and Appendix C. Two of these youth programs focused on juvenile justice referrals (indicated populations using substances) but most addressed the needs of universal (entire populations) or selective (populations at risk for substance abuse) populations.² Two other programs focused on pregnant or parenting women and their children to support early childhood development. The

remaining programs focused on promoting cultural practices and skills development across multiple age groups, mobilizing adults to change community conditions that support substance abuse and other behavioral health problems, or, in one case, educating formerly incarcerated adults to serve as peer mentors to an adult reentry population.

Risk and Protective Factors Addressed. Most of the participating programs addressed the impact of historical trauma on their communities (see Figures 3 and 4 and Appendix B). Other common risk factors included family history of substance abuse, community norms favorable to substance abuse, early initiation of alcohol and other drug use, and availability of alcohol and other drugs. A wide range of other risk factors were addressed as well, such as mental health challenges, early academic failure, family management problems, community disorganization, limited law enforcement, and low perception of substance use risks. Many programs took a strengths-based approach and focused on building protective factors. In particular, several programs provided opportunities for participants to engage in activities to promote cultural practices and connectedness as well as strengthen coping skills. Other common protective factors addressed were community cohesion, bonding to school, and building social competencies.

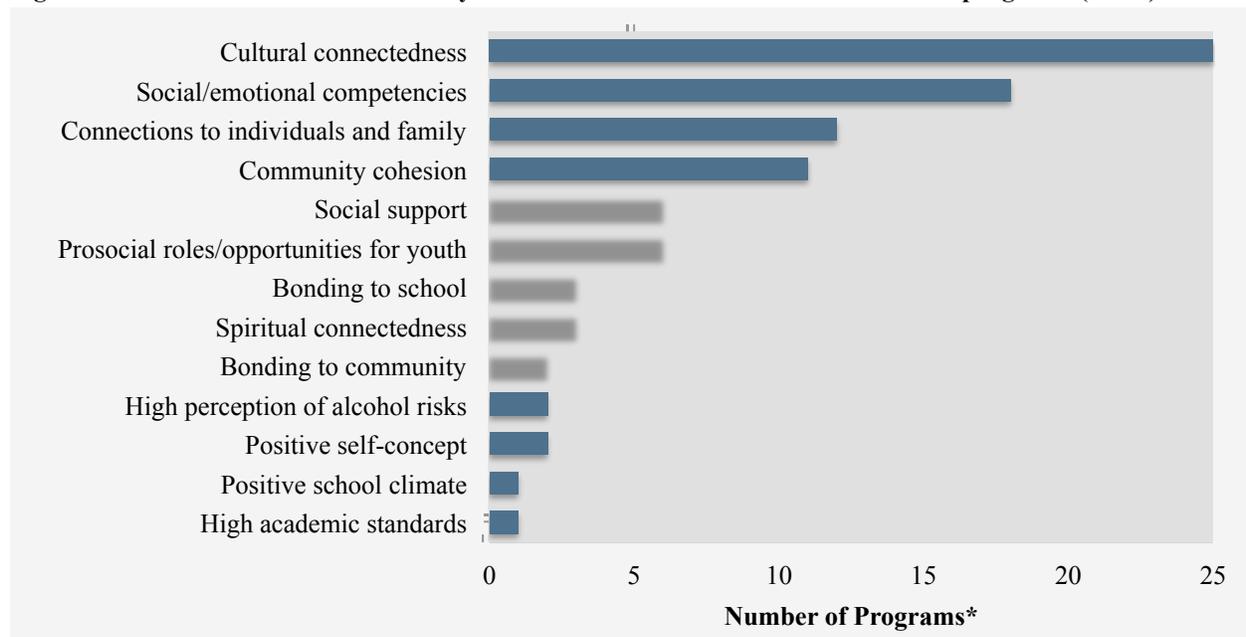
² For definitions of universal, selective, and indicated, see O’Connell, M. E., Boat, T., & Warner, K. E. (Eds.). (2009). *Preventing mental, emotional, and behavioral disorders among young people: Progress and possibilities*. National Research Council and Institute of Medicine of the National Academies. Washington, D.C.: The National Academies Press.

Figure 3. Risk factors addressed by FY2010-FY2014 Service to Science AI/AN programs (N=34)



*Numbers add to more than 34 because programs addressed multiple risk factors.

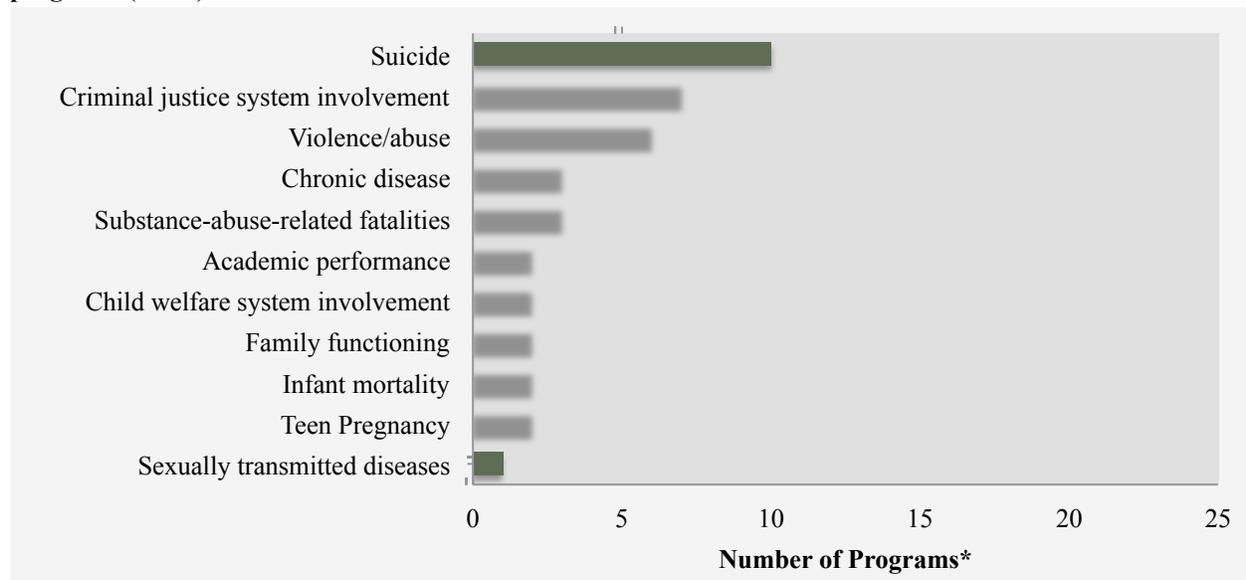
Figure 4. Protective factors addressed by FY2010-FY2014 Service to Science AI/AN programs (N=34)



Consequences Addressed. All 34 programs addressed substance abuse consumption patterns. However, 30 of these programs also addressed the consequences of substance abuse. Of greatest concern was the link between substance abuse and suicide, with ten of the 34 programs aiming to prevent suicidal behaviors. A focus on suicide prevention comes as no surprise given that, in 2012, the suicide rate for AI/AN adolescents and young ages 15–34 (18.43 per 100,000) was

much higher than the overall U.S. rate for that same age group (12.77 per 100,000);³ and suicide is the second leading cause of death among AI/AN adolescents and young adults ages 15–34. Other common consequences addressed included those related to criminal justice involvement, such as arrest or recidivism, and violence or abuse, including child abuse and neglect. See Figure 5 and Appendix B.

Figure 5. Consequences of substance abuse addressed by FY2010–FY2014 Service to Science AI/AN programs (N=34)



Strategies Implemented. A broad range of strategies is reflected in the work seen across program cohorts (see Table 1 and Appendix C). The most commonly applied strategy was skills-based education, which included training on social and emotional competencies as well as decision-making, goal-setting, coping, and resistance skills. To address the prioritized risk factor of historical trauma, many of the programs provided culturally tailored education, training, mentoring, and access to help participants understand the impact of historical trauma and learn traditional coping methods. Some of these programs were intensive immersion experiences that featured highly engaging and culturally significant activities such as training horses. Others were delivered as training sessions and events over time, both in school and community settings. A few of the programs utilized digital storytelling to convey messages of hope and healing while one program developed an extensive guide to traditional healing methods that can be used to address trauma. To address social norms favoring alcohol and drug use and the availability of alcohol and other drugs, seven of the projects used a coalition approach to strengthen community engagement in prevention activities, advocate for policy and system change, and deliver comprehensive prevention strategies. Other programs responded to the intergenerational cycle of substance abuse in families by enhancing access to prevention services or providing education and support to pregnant and parenting mothers with young children. Finally, although most programs anticipated reductions in substance abuse behaviors based on the strengthening of various protective factors, two programs addressed substance abuse as a risk factor for suicide, and another program targeted substance abuse as a precursor to risky sexual behavior.

Table 1. Number of FY2010–FY2014 Service to Science AI/AN programs by type of prevention strategy implemented (N=34)

General Strategy	Number
Culturally-responsive, prevention skills education**	19
Community mobilization	7
Communication campaigns	5
Cultural immersion and experiential learning	5
Mentoring	5
Mutual support	5
Service or care coordination	5
Alternative activities	2
Assessment	1
Classroom management	1
Psycho-educational intervention	1
Service learning	1
Community events	1

*Numbers add to more than 34 because some programs implemented more than one strategy.

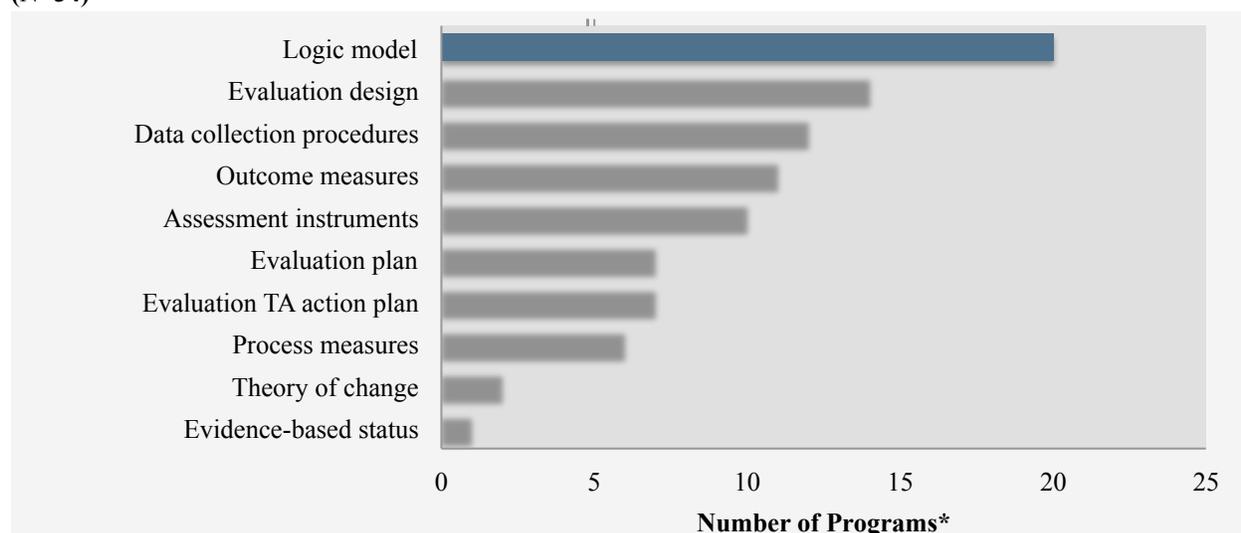
**Includes educational approaches that focus on social and emotional competencies as well as decision-making, goal-setting, resistance, and coping skills.

Helping Programs Achieve Evaluation Goals

As previously noted, each of the participating programs worked with their technical assistance providers to articulate their goals for evaluation capacity building and craft action plans for accomplishing these goals. With these action plans as a guide, technical assistance providers delivered 30–40 hours of follow-up support to each program. In most cases, this assistance was provided remotely through phone and e-mail correspondence. Figure 6 below shows the content areas upon which technical assistance was focused and how many programs worked on each of the focus areas.

As indicated by the table, the majority of programs required technical assistance on logic model development. This was not surprising given that programs learned, as part of their foundational instruction on evaluation methods, that logic models are a helpful tool for organizing evaluation efforts. With programs serving AI/AN populations, providers explored logic model frameworks that resonated most with participants, oftentimes selecting non-linear models. Other common evaluation activities requiring technical assistance included strengthening evaluation methods and research design as well as developing and refining data collection procedures. Assistance also was required finding, adapting, and developing process and outcome measures, especially measures that were culturally relevant. Very few programs required or requested technical assistance on gaining evidence-based recognition. Perhaps the lack of focus on evidence-based status simply reflected the time and prerequisite evaluation accomplishments needed to become evidence-based as opposed to a lack of interest in such a designation.

Figure 6. Types of technical assistance provided to FY2010–FY2014 Service to Science AI/AN programs (N=34)



Supporting Additional Evaluation Enhancement Activities

Twenty of the participating programs successfully applied for subcontracts to fund additional evaluation enhancement activities. This funding opportunity allowed programs to build upon their initial enhancement activities and pursue more rigorous methods for documenting their outcomes. Appendix D highlights the key evaluation enhancements reported. The enhancements implemented reflect strong progress across key stages in the evaluation process, including engaging stakeholders in the evaluation process, constructing an effective logic model, increasing the rigor of the evaluation design, selecting appropriate evaluation methods and tools, analyzing data, and reporting evaluation findings. Major impacts included the following:

- ***New or enhanced evaluation tools and data collection procedures*** that increased programs' ability to measure change. These tools included an updated and digitized cultural assessment, pre- and post-assessment instruments, language proficiency benchmarks, screening tools, automated surveys, and secure data collection and storage. In particular, technical assistance providers and participants emphasized positive outcomes related to the development of culturally relevant evaluation tools and methods.
- ***Additional funding and/or recognition***. For example, one tribal organization that participated in Service to Science noted that they were able to apply their enhanced evaluation capacity to a successful application for a SAMHSA Access to Recovery³ grant. Another noted that they “increased their capacity to apply for future funding based on the solid protocols and results obtained from [the Service to Science] evaluation effort.” Two programs noted that they are now planning to prepare an application for

³ The purpose of this program is to provide funding to Single State Agencies for substance abuse services in the states, territories, tribes, and tribal organizations to carry out voucher programs for substance abuse clinical treatment and recovery support services.

SAMHSA's National Registry for Evidence-based Programs and Practices (NREPP), another two plan to submit an article to a peer-reviewed journal, and four programs cited success in applying for additional funding for program and/or evaluation activities following their Service to Science involvement. In terms of evidence-based status, one of the programs achieved recognition through their state's evidence-based workgroup. The remaining programs were still working toward this goal. While none of the programs had published their evaluation findings, four of the programs were planning to do so, and one program described presenting program information at both SAMHSA- and state-sponsored conferences.

- ***Increased capacity to implement evaluation activities in the future, and in different settings.*** Programs noted how newly developed tools could be used for other evaluation projects. In addition, some programs had formed partnerships with evaluators or schools that they planned to leverage and apply to future evaluation efforts. Specifically, participants indicated that they were better prepared as individuals and organizations to:
 - Implement their program in other sites as well as train staff at these sites how to implement the program with fidelity.
 - Use newly-developed monitoring and observation tools to guide expanded implementation of the program. Newly developed “fidelity self-assessment monitor logs and observation tools will help coaches of new instructors guide their implementation for the program.”
 - Collaborate with partner organizations on “methods of appropriately sharing data to streamline services for our clients.”
 - Leverage improved logic model and newly developed outcome measurement tools to secure additional evaluation funding.
 - Successfully identify, develop, and/or implement process and outcome measures.
 - Strategically target key people from referring agencies and communities to better coordinate activities surrounding recruitment, transportation, and participation.
 - Increase outreach efforts to volunteers to help maintain program continuity.
 - Encourage other tribal departments to analyze data collected via focus group and community input sessions using qualitative data analysis software.
 - Articulate project goals and/or ultimate outcomes of the evaluation and future projects.
 - Identify program strengths and weaknesses to make program and curriculum improvements and enhancements.
 - Develop Internal Review Board applications and corresponding informed consent procedures.

- **Increased sensitivity to evaluation ethics.** One representative noted that program staff increased their understanding of research ethics and the role of sovereignty in conducting evaluation with AI/AN tribes and organizations, their skills in protecting the rights of individuals and communities when collecting data, and their ability to appropriately handle sensitive data. Another reported “increased skills in data collection of sensitive information.” Similarly, a third program indicated that they used their newly gained understanding of evaluation to educate participants about their rights as evaluation participants which “they can use when invited to participate in future evaluation and research projects.”

Overcoming Challenges: Lessons Learned

Information on factors influencing programs’ ability to design and implement evaluation enhancements was derived from subcontract recipients’ mid-term and final reports as well as guided discussions with select participants and technical assistance providers (see Appendix A). First, we present factors that challenged progress followed by factors that facilitated evaluation capacity building.

Challenges to Evaluation Capacity Building

Information on factors influencing programs’ ability to design and implement evaluation enhancements was derived from subcontract recipients’ mid-term and final reports as well as guided discussions with select participants and technical assistance providers (see Appendix A). First, we present factors that challenged progress followed by factors that facilitated evaluation capacity building:

- **Limited timeframe.** Participants struggled to implement all of their evaluation enhancements in the timeframe provided (one year), primarily because activities took longer than anticipated. For example, developing protocols to protect human subjects and gaining rapport with study participants and key leaders required more time and effort than scheduled.
- **Delays getting started.** Several subcontract recipients experienced delays in implementing proposed subcontract activities. Late starts compressed what was already perceived to be a relatively short timeline and hampered program abilities to implement all activities proposed.
- **Limited access to evaluation participants.** Programs struggled to recruit participants and/or experienced relatively high attrition which affected their ability to make claims about program effectiveness. As reported in guided discussion with technical assistance providers and program representatives, evaluation and research are often viewed as mystifying, and this viewpoint can discourage participation in evaluation initiatives.
- **High staff turnover or limited staff availability.** Both factors contributed to project delays or modifications of tasks, and participant attrition (see above). In some cases the

burden of evaluation activities on staff was higher than expected, and their time could not be covered by the subcontract.

- **Limited funding.** Many programs were challenged to maintain funding for implementation costs, so evaluation costs might have been viewed as untenable and unaffordable.
- **Methodological challenges.** Several programs experienced methodological challenges such as finding the right statistical software, using a structured observational technique, implementing participatory evaluation activities, and developing culturally responsive measures.
- **Limited access to data.** Access to data also represented a major challenge. As one technical assistance provider pointed out, tribal communities have a long history of gathering data and have access to significant sources of data. At the same time, politics, mistrust, and at times a lack of community infrastructure can pose significant barriers to accessing these data.
- **Scarce resources.** Scarce prevention resources in some communities resulted in some programs being funded by multiple sources. This blending of funds sometimes led to confusion when it came to identifying the purpose and intended outcomes of a program.
- **Strained collaborations.** Programs experienced difficulties collaborating with partnering organizations, including, for example, obtaining commitment from schools or other agencies, updating data sharing agreements, and coordinating transportation between referring agencies and tribal communities.

Factors that Facilitated Evaluation Capacity Building

Review of program documents and conversations with program representatives and technical assistance providers revealed a number of factors that facilitate evaluation capacity building with tribal populations. These include the following:

- **Availability of skilled and experienced technical assistance providers.** The expertise and accessibility of the technical assistance providers, the direct contact with the technical assistance providers, and opportunities to learn from other program participants during centralized trainings helps engage programs in the evaluation planning process.
- **Taking time for relationship-building.** Listening to and building a relationship with program participants were critical first steps for establishing an effective technical assistance experience. Ample time and direct contact between technical assistance providers and program representatives were needed to establish a trusting relationship.
- **Recognizing and using qualitative data.** Because a strong value is placed on qualitative data, it was essential for technical assistance providers to validate the merits of qualitative data and help program representatives explore ways to balance qualitative and quantitative methods.

- ***Sensitivity to context.*** Evaluation methods and tools need to be sensitive to the context in which information is gathered. Similarly, it was important for the technical assistance providers to understand and respect the cultural context within which evaluation questions are formed and evidence is weighed. Technical assistance helped to promote awareness and understanding of these contextual factors.
- ***Appreciation of practice-based evidence.*** Most recognized evidence-based programs and strategies were not developed for AI/AN communities, so it was important for technical assistance to support the evaluation of innovative programs and strategies developed in tribal communities as well as methods for evaluating adaptations of evidence-based programs.
- ***Recognizing and respecting diversity.*** Technical assistance providers needed to have a high degree of cultural competency for working with AI/AN communities and recognize the diversity that exists across tribal communities. If trust was not established between technical assistance providers and program representatives and/or if the cultural context around program strategies and evidence of effectiveness required frequent translation for the technical assistance providers, evaluation capacity building progress frequently stalled.
- ***Using culturally competent tools.*** Descriptions related to how programs and strategies create change are often “circular” in nature as opposed to “linear”. Technical assistance providers understood and respected this different perspective and supported evaluation tools and methods that were in alignment with a “circular” view on change.
- ***Attention to political processes.*** It was critical to recognize and understand the political process in tribal communities that results in and influences decisions about funding, data access, in-kind support, and evaluation priorities.
- ***Reliance on strengths-based approaches.*** Prevention programs were oftentimes developed to build upon strengths more so than to reduce problem behaviors or conditions. Therefore, technical assistance providers drew from their knowledge and expertise in asset- or strength-based approaches to prevention such as those of resiliency and positive youth development.

Subcontract recipients also offered words of advice in terms of how to overcome challenges to implementing evaluation enhancements:

- ***Allocate ample time to project timelines.*** One program noted, “If the funding for the project is received later than expected, work closely with whoever is necessary to revise timelines and project goals to be put in the best position for success.” Another reported: “Reduce burden on program staff by budgeting sufficient time in the subcontract for their work.” A third indicated that “It’s important to have an external evaluator readily available as part of the request for proposal so there are no delays.” A fourth reported: “Be realistic when setting timelines and be precise with the deliverables expected.”

- ***Work collaboratively with partners, schools, and the community.*** Although some programs cited collaboration as a challenge, others saw it as an asset. As one program noted, “Identify one individual at each school to assist with the survey processing. Working collaboratively on the project's design and content allows your team to better define the project overall, and to identify in particular the elements of the project description and forms and the focus groups.”

Meeting the Evaluation Needs of Tribal Communities

SAMHSA’s Service to Science initiative has made major strides in meeting the evaluation needs of tribal communities. Over the past four years, the initiative has served 34 programs developed by and for AI/AN populations. Programs have varied in terms of strategies implemented and populations served, with most focusing on culturally-responsive, skills-based education for adolescents and young adults in order to promote cultural connectedness and address the deleterious effects of historical trauma.

Overall, programs serving AI/AN communities demonstrated major gains in strengthening their evaluation capacities to better demonstrate evidence of effectiveness. Subcontract recipients in particular have, with a relatively small amount of money and intensive, one-on-one and relationship-based technical assistance provided over two years, made enormous strides. Most notably, they have developed new or enhanced existing evaluation tools and data collection procedures, leveraged evaluation enhancements into additional funding and/or recognition, increased their capacity to implement evaluation activities in the future and in more settings, and increased their sensitivity to evaluation ethics.

A closer look at CAPT work with AI/AN populations also provided some important lessons learned for future evaluation capacity-building efforts. We found that many aspects of the initiative work well. For example, evaluation technical assistance can help to build bridges between programs and research institutions; demystify evaluation and related concepts; and help to clarify, through logic modeling and other tools, the key components of a program as well as goals and objectives. Technical assistance providers are prepared to address the challenges of limited data sources.

We also learned that tribal communities have a long history of evaluation that informs the exploration of evaluation capacity goals between program participants and their technical assistance providers. Given the importance of building relationships and establishing trust between program participants and technical assistance providers, we developed a staged and layered approach to delivering evaluation capacity building services. Yet, we also found that when that amount of time is constrained, it is difficult to meet evaluation technical assistance goals, and for the organizations participating in the evaluation capacity building process, to achieve their evaluation enhancements.

Appendix A. Methods Used to Assess Service to Science Impact

To assess the impact of the evaluation capacity-building services provided through Service to Science, we sought to answer four main questions:

1. What types of programs serving AI/AN communities received evaluation capacity building services through Service to Science?
2. What types of evaluation technical assistance did programs receive?
3. What kinds of evaluation enhancements did programs achieve?
4. What evaluation challenges did programs encounter when responding to the unique needs of the populations they serve? How did they prevail over these challenges?

To answer these questions, we abstracted information from the following program documents:

- Service to Science program applications
- Program action plans of proposed evaluation technical assistance
- Monthly reports of Service to Science evaluation technical assistance delivered
- Program subcontract proposals to implement evaluation enhancements
- Program subcontract mid-term and final reports on the implementation of evaluation enhancements

We also conducted guided discussions with representatives from nine programs serving AI/AN populations and eight Service to Science technical assistance providers paired with AI/AN programs.

Appendix B. FY2010–FY2014 Service to Science AI/AN programs by risk and protective factors and behaviors addressed

Program	Risk Factors	Protective Factors	Consequences
Back to the Boards <i>Warm Springs, Oregon</i>	Family history of substance abuse	Cultural connection, mentoring, family bonding	Substance abuse, sudden infant death syndrome
Chi-e-chee Coalition <i>Kingston, Washington</i>	Community laws and norms favorable to substance abuse, early onset of substance use	Community cohesion	Underage alcohol and other drug use
Discovery Dating <i>Green Bay, Wisconsin</i>	Early initiation of alcohol use, social norms favorable to problem behavior	Social competencies, self-regulation	Teen pregnancy, substance abuse
Penobscot Nation Counseling Services <i>Indian Island, Maine</i>	Availability of drugs, depression	Social competencies, cultural connection, community cohesion	Suicide, substance abuse, mental health
Therapeutic Adventure for Native American Youth <i>Albuquerque, New Mexico</i>	Mental health disorders, early onset of substance use, poverty, family history of substance abuse, early academic failure, historical trauma	Social competencies, prosocial roles for youth in community, cultural connection	Mental health, substance abuse
Two Worlds of Cultural Immersion Camp <i>Billings, Montana</i>	Historical trauma, family history of substance abuse, child abuse, trauma	Cultural connection, social competencies, community cohesion	Family reunification, substance abuse
Warrior Down Re-entry Coaches <i>Nampa, Idaho</i>	Trauma, social norms favorable to substance abuse	Social support, spiritual connection	Substance abuse, incarceration, crime
Young Men's Native Gathering <i>Sparks, Nevada</i>	Historical trauma, early onset of substance use, community norms favorable to substance abuse	Cultural connection, social competencies, mentoring	Substance abuse, bonding to community
Youth Empowerment Program <i>Anchorage, Alaska</i>	Community disorganization, early onset of alcohol use	Social support, social competencies, community cohesion	Alcohol use, recidivism
Achieving Our Dreams <i>Buffalo, New York</i>	Historical trauma, family history of substance abuse, social norms favorable to substance abuse, availability of alcohol and other drugs	Community cohesion, cultural connection	Substance-abuse related fatalities, chronic disease
Discovering Our Story <i>Portland, Oregon</i>	Historical trauma	Social competencies, cultural connection	Substance abuse, domestic violence, mental health, chronic disease

Appendix B (continued)

Program	Risk Factors	Protective Factors	Consequences
Guadalupe Prevention Partnership <i>Guadalupe, Arizona</i>	Historical trauma, poverty, alcohol availability and promotion, limited law enforcement, family history of substance abuse, family management problems, community norms favorable to substance abuse	Community cohesion, social competencies, high perception of alcohol risks, cultural connection	Underage alcohol use, substance abuse
Healthy and Whole <i>Suquamish, Washington</i>	Mental health disorders, early onset of substance use, historical trauma, child abuse, family management problems	Emotional regulation, community cohesion, cultural connection, mentoring	Substance abuse, family involvement in child welfare system, mental health
Ichishkiin Culture and Language as Protective Factors <i>Wapato, Washington</i>	Historical trauma, early academic failure, early onset of substance use	Cultural connection, positive self-concept	Substance abuse, school attendance and academic achievement
Lakota Circles of Hope <i>Rapid City, South Dakota</i>	Historical trauma, poverty, early academic failure, community disorganization, family history of substance abuse, social norms favorable to substance abuse	Cultural connection, social competencies, high perception of substance use risks, bonding to school	Substance abuse, alcohol-related fatalities, suicide, chronic disease
Maehnowesekivah Wellness Center Prevention Program <i>Gresham, Wisconsin</i>	Historical trauma, family history of substance abuse, community norms favorable to substance abuse, domestic violence	Social competencies, prosocial roles for youth in community, cultural connection, family communication	Substance abuse, family functioning, wellness
Native American Therapeutic Horsemanship Program <i>Dallas, Oregon</i>	Social norms favorable to substance abuse and delinquency	Self-efficacy, prosocial roles for youth in community	Delinquency, substance abuse
Osage Nation Tribal Youth Program <i>Pawhuska, Oklahoma</i>	Family history of substance abuse, low perception of substance abuse risks	Community cohesion	Substance abuse, child abuse
Wolakota Oun Skunpo <i>Lower Brule, South Dakota</i>	Low perception of risk, social norms favorable to substance abuse	Cultural connection	Alcohol and other drug abuse
Maajtaag Mnobmaadzid Program <i>Detroit, Michigan</i>	Family management, family history of substance abuse, poverty	Family bonding, community cohesion	Access to prenatal care, infant mortality, substance abuse

Appendix B (continued)

Program	Risk Factors	Protective Factors	Consequences
Minobimaadiziwin Coalition <i>Lac du Flambeau, Wisconsin</i>	Low perception of risk, retail availability of alcohol	Community cohesion, cultural connection, family bonding, positive alternative activities for youth	Underage drinking and other substance abuse
Sault Tribe Alive Youth Project <i>Sault Ste. Marie, Michigan</i>	Early antisocial behavior, trauma, early academic failure, school climate	Community cohesion, social support	Suicide, bullying
The Healthy Families Yupik-Style Initiative <i>Bethel, Alaska</i>	Historical trauma, child abuse and neglect, family history of substance abuse, family conflict	Family management skills, cultural connection, access to social support	Social competencies, bonding to community, substance abuse
Wakanyeja Kin Wakan Pi <i>St. Paul, Minnesota</i>	Historical trauma, family history of substance abuse	Social competencies, cultural connection	Addiction, child abuse
Wicozani Patintanpi <i>Winner, South Dakota</i>	Historical trauma	Social competencies, prosocial roles for youth in the community, cultural connection	Suicide, substance abuse, violence
Anishnaabek Healing Circle <i>Sault Ste. Marie, Michigan</i>	Historical trauma, family history of substance abuse	Social competencies, access to social support, cultural connection	Substance abuse, social connection, arrests
Date But Wait <i>Tahlequah, Oklahoma</i>	Low perception of risk, early onset of substance use and sexual activity	Cultural connection	Teen pregnancy, sexually transmitted infections, substance abuse, suicide
Doorway to a Sacred Place <i>Anchorage, Alaska</i>	Trauma, historical trauma, family conflict	Cultural connection	Suicide, homicide, domestic violence, substance abuse
Gathering of Native Americans in Urban Areas <i>Oakland, California</i>	Historical trauma	Cultural connection, family and community bonding, mentoring, spiritual connection, emotional regulation	Community engagement, spiritual growth, substance abuse, mental health
PAX for Middle School <i>White Swan, Washington</i>	School climate, early academic failure, poverty, depression, early onset of substance use	Bonding to school, social competencies, high academic standards	Suicide, substance abuse, academic achievement, juvenile crime, school attendance, school disciplinary referrals
Teck John Baker Youth Leaders Program <i>Kotzebue, Alaska</i>	Depression, early onset of substance use, peer conflicts	Prosocial roles for youth in community, social competencies, positive school climate, cultural connection, adult mentors	Suicide, bullying, substance abuse

Appendix B (continued)

Program	Risk Factors	Protective Factors	Consequences
Wiconi Ohitika Youth Suicide Prevention Project <i>Ft. Totten, North Dakota</i>	Family history of suicide and substance abuse, historical trauma, family conflict, child abuse and neglect, poverty, academic failure	Family bonding, cultural connection, Positive self-concept, access to social supports, social competencies	Suicide, substance abuse
American Indian Youth and Summer Aquatic Program <i>San Diego, California</i>	Child abuse and neglect, family management problems, availability of drugs, historical trauma	Cultural connection, social competencies, spiritual connection, mentoring, bonding to community	Alcohol-related mortality, adolescent binge drinking, mental health, juvenile justice and child welfare referrals
Dakotah Pride Center <i>Agency Village, South Dakota</i>	Historical trauma, family conflict, academic failure, early onset of alcohol and other drug use, mental health problems, community norms favorable to substance abuse	Social competencies, cultural connection, self-efficacy, family bonding, emotional regulation, bonding to school	Suicide, mental health, substance abuse

Appendix C. Prevention Strategy and Specific Populations Targeted by FY2010-FY2014 Service to Science Participating Programs that Address Trauma and Violence

Program	Prevention Strategy	Populations
Back to the Boards	Provides an educational and skill-building program to reduce sudden infant death syndrome and parental substance abuse by teaching young women the traditional cradleboard method for carrying infants on their backs.	Young pregnant and parenting women
Chi-e-chee Coalition	A community mobilization effort to reduce youth alcohol and other drug use and promote healthy community norms regarding substance use primarily through coalition and policy development .	Youth, community and tribal leaders
Discovery Dating	Offers an educational and skill-building program for adolescents to promote safe and healthy relationships and decision making.	Adolescents ages 12-17
Penobscot Nation Counseling Services	An educational, skill-building, and support program to enhance protective factors for youth by providing prevention education and summer job opportunities.	Adolescents
Therapeutic Adventure for Native American Youth	Provides positive alternative activities and experiential learning for high-risk youth to strengthen social competencies and reduce risk-taking behaviors.	Court referred adolescents ages 12-17
Two Worlds of Cultural Immersion Camp	A cultural immersion camp experience that promotes educational, skill-building, and mentoring opportunities for participants to strengthen cultural connectedness and social competencies.	All age groups
Warrior Down Re-entry Coaches	Offers support, mentoring, and skill-building opportunities for adults reentering the community from prison and treatment settings to reduce substance abuse and recidivism.	Adults of all ages, reentry populations
Young Men's Native Gathering	A two-day camp that provides mentoring, education, and skill-building experiences for participants to increase cultural connectedness and promote healthy decision making.	Adolescent males, ages 13-17
Youth Empowerment Program	Provides education and support for youth and young adult indicated populations and promotes access to services.	Adolescents and young adults court referred for alcohol violations
Achieving Our Dreams	Mobilizes the community to address social norms supportive of substance abuse through community education campaigns that address cultural risk and protective factors and referrals to supportive services.	All age groups
Discovering Our Story	A multi-media curriculum to improve health and behavioral health outcomes for families that features video stories told by exemplary elders and is based on the Native American hero's journey story model.	All age groups
Guadalupe Prevention Partnership	Promotes community norms that discourage substance abuse through culturally engaging positive alternative community events and prevention education campaigns.	All age groups
Healthy and Whole	A 33-week trauma informed educational program to promote behavioral health and wellness based on Dialectic Behavioral Therapy.	All age groups

Appendix C (continued)

Program	Prevention Strategy	Populations
Ichishkiin Culture and Language as Protective Factors	Offers youth and young adults an educational opportunity to learn traditional native language and culture to foster cultural connectedness and positive self-esteem.	At-risk adolescents and young adults
Lakota Circles of Hope	A school-based prevention curriculum that utilizes culturally engaging methods to teach social competencies and healthy decision-making skills.	Children grades 2-5
Maehnowesekivah Wellness Center	Provides positive alternative activities and school-based prevention education programs to strengthen protective factors for children and youth.	Children and youth ages 4-17
Native American Therapeutic Horsemanship Program	A skill-building program for at-risk youth and young adults that fosters cultural connectedness, social competencies, and emotional self-regulation through experiential learning with mustangs.	Youth and young adults ages 12-25
Osage Nation Tribal Youth Program	Seeks to prevent and reduce youth and young adult arrests related to alcohol abuse through policy initiatives, community mobilization, and education for alcohol retailers.	Youth and adults ages 12 and older
Wolakota Oun Skunpo	Strengthens community engagement in prevention planning through the administration of a culturally relevant survey tool to assess substance abuse trends.	All age groups
Maajtaag Mnobmaadzid Program	Addresses perinatal health disparities through education and support for women with young children.	Mothers and infants
Minobimaadiziwin Coalition	Promotes healthy lifestyles for youth and young adults through community mobilization to reduce substance abuse, positive alternative activities, parent engagement, and environmental change strategies.	Youth and young adults ages 12-25
Sault Tribe Alive Youth Project	Strengthens community capacity to prevent suicide and related behavioral health problems through community mobilization, educational campaigns, and service coordination .	Youth and young adults ages 10-24
The Healthy Families Yupik-Style Initiative	A 10-session cultural education and support program to strengthen wellness and social competencies and promote effective parenting practices.	Adults ages 18-54
Wakanyeja Kin Wakan Pi	Seeks to prevent and reduce prenatal drug exposure by providing education, support, and case management to high-risk pregnant and parenting women and their families.	Children, youth, and adults up to age 54
Wicozani Patintanpi	Offers a 22-week educational curriculum accompanied by a cultural immersion camp experience to foster protective factors for youth related to social competencies and access to meaningful community roles.	Adolescents ages 12-17
Anishnaabek Healing Circle	Promotes community mobilization, education, and access to support services through digital story telling that shares culturally relevant messages of resilience and wellness.	Adolescents and adults of all ages
Date But Wait	An engaging school-based presentation designed to foster healthy decision-making, social competencies, and sexual health. Students can raise sensitive questions about the curriculum via text messaging.	Youth and young adults ages 12-25

Appendix C (continued)

Program	Prevention Strategy	Populations
Doorway to a Sacred Place	Provides a guide for implementing traditional healing methods , such as talking circles, that can be used to help communities respond to crises and trauma.	Children, youth, and adults of all ages
Gathering of Native Americans in Urban Areas	A four-day training event for youth centered around four significant cultural themes of belonging, mastery, interdependence, and generosity to promote a strong cultural identity and connectedness as well as prosocial skill development.	Adolescents ages 12-18
PAX for Middle School	An adaptation of the Good Behavior Game for use with middle school students to foster classroom environments that reinforce social competencies, bonding to school, and academic success for all students.	7 th and 8 th grade students
Teck John Baker Youth Leaders Program	A positive youth development project that provides meaningful school and community roles for youth as leaders in prevention planning and implementation of projects to prevent and reduce suicide and related behavioral health problems.	Children, youth and young adults
Wiconi Ohitika Youth Suicide Prevention Project	A community mobilization effort to raise awareness regarding suicide and related behavioral health concerns, promote access to behavioral health resources, and foster community and cultural connectedness .	Adolescents and young adults ages 12-25
American Indian Youth and Summer Aquatic Program	Offers an experiential learning camp featuring aquatic and cultural activities to promote social competencies, self-esteem, and cultural connectedness.	Youth and young adults ages 9-22
Dakotah Pride Center	An adaptation of the American Indian Life Skills Program to foster self-efficacy, social competencies, and social support with students.	Middle school students

Appendix D. Evaluation Enhancements Implemented with Subcontract Dollars

Only programs that participated in Service to Science in FY2010 through FY2013 were eligible for subcontract funding to make further evaluation capacity-building enhancements. Four programs—Doorway to a Sacred Place, GONA in Urban Areas, Tech John Baker Youth Leaders, and Wiconi Ohitika Youth Suicide Prevention Project—were in the subcontract award period at the time of this report, so data from their final reports were not available for analysis; however, data were abstracted from their mid-term subcontract reports. One program—Wakanyeja Kin Wakan Pi (Our Children Are Sacred)—was awarded a subcontract but had to decline the funds due to organizational restructuring.

Program	Evaluation Enhancements
Native American Therapeutic Horsemanship Program	Modified pre-post survey and implemented with new program cohort. Implemented new observational process measure. Created and implemented surveys with parents, teachers, and counselors. Established advisory council to guide evaluation planning. Conducted data analysis. Prepared evaluation report.
Sault Tribe Alive Youth (STAY) Project	Implemented a case study approach with focus groups and interviews to examine changes in Partnership Board functioning and their relationship to project activities and outcomes. Obtained and trained staff on software for qualitative data analysis.
Teck John Baker Youth Leaders Program	Administered monthly online surveys to Youth Leaders, Youth Leader advisors, and school principals. Revised surveys and obtained IRB approval. Conducted focus groups with Youth Leaders and Youth Leader captains. Conducted interviews with Youth Leader advisors. Administered outcome assessment instruments school-wide.
Therapeutic Adventure for Native American Youth (TANAY) Program	Developed and administered staff feedback surveys. Conducted focus groups with staff. Implemented a staff post-training outcome survey. Observed, and conducted interviews with, youth participants. Conducted a fidelity assessment. Analyzed data collected from youth after program completion.
Warrior Down Re-entry Coaches	Developed, pilot-tested, and revised the program's assessment battery, including its initial baseline instrument, a new qualitative follow-up checklist, a multicultural validation instrument for that checklist, and a group facilitation process evaluation instrument.
Wiconi Ohitika Youth Suicide Prevention Project	Conducted American Indian Life Skills curriculum leader training. Developed alternative methods for obtaining information to create the evaluation tool.
Wicozani Patintanpi	Developed and implemented pre-post-post surveys with youth and parents. Drafted fidelity measures.
Native American Therapeutic Horsemanship Program	Modified pre-post survey and implemented with new program cohort. Implemented new observational process measure. Created and implemented surveys with parents, teachers, and counselors. Established advisory council to guide evaluation planning. Conducted data analysis. Prepared evaluation report.
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Appendix D (continued)

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