Department of Homeland Security (DHS) FY2021 Targeted Violence and Terrorism Prevention (TVTP) Grantee Evaluation

Boston Children's Hospital

Developed for:

Science and Technology

Developed by RTI International

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List of Abbreviations

BCH	Boston Children's Hospital
CAPO	Compliance Assurance Program Office
CP3	Center for Prevention Programs and Partnerships
DHS	Department of Homeland Security
IMP	Implementation and Measurement Plan
IRB	Institutional Review Board
LAH	Life After Hate
LCC	Learning Community Call
MAPP	Massachusetts Area Prevention Program
MHPs	Mental Health Practitioners
PPN	Prevention Practitioner's Network
SME	Subject Matter Expert
T-SAM	Targeted Violence and Terrorism Strengths, Needs, and Risks: Assessment & Management Tool
TCRC	Trauma and Community Resilience Center
TVT	Targeted Violence and Terrorism
TVTP	Targeted Violence and Terrorism Prevention

Executive Summary

The Department of Homeland Security's Science and Technology Directorate contracted RTI International to conduct research and evaluation of the Boston Children's Hospital (BCH) FY2021 Targeted Violence and Terrorism Prevention (TVTP) grant, aimed at increasing the capacity of community-based mental health practitioners (MHPs) to assess clients at risk for targeted violence and terrorism (TVT) and manage that risk. The evaluation team conducted a process evaluation of all components of the grant project, with a focus on identifying project accomplishments, challenges, and recommendations for future grantees. In addition, the team conducted an outcome evaluation of a training BCH held in February 2023. The team reviewed training curricula and other materials provided by BCH, observed one training, and interviewed staff and project partners.

BCH successfully developed the first version of a risk assessment tool for MHPs: the Targeted Violence and Terrorism Strengths, Needs, and Risks: Assessment & Management Tool (T-SAM) following a period of research into the risk and protective factors for TVT and, relatedly, suicidality. This tool was assessed for usability and feasibility with clinicians from BCH and case managers from Life After Hate (LAH). In addition, MHPs were recruited from across the country to be trained on the T-SAM and how to use it with their clients. Fifty MHPs from across the country participated in this training, where pre-/posttests demonstrated a 12% increase in knowledge. In addition, surveyed MHPs demonstrated statistically significant increases in confidence identifying, assessing, and treating clients at risk for TVT. Twenty-one of the MHPs that were trained

on the T-SAM participated in Learning Community Calls (LCCs) for 6 months after the training. In these LCCs, BCH provided case consultation, facilitated discussion, and answered questions to support further learning about the T-SAM. 83% of participating MHPs reported that the training and LCCs prepared them to use the T-SAM in clinic. 94% of respondents agreed or strongly agreed that the T-SAM is a valuable tool for TVT risk assessment and management.

During the course of the LCC period, trained MHPs used the T-SAM with a total of 27 clients at risk for TVT. BCH collected several forms of data from LCC participants, including monthly surveys, a 6-month follow-up survey, and de-identified patient data. These data, in addition to data collected during the usability and feasibility assessment, were used to identify areas to further develop the T-SAM. BCH shared the T-SAM tool and findings from their data collection through conferences, academic publications, and practitioner-focused briefs. In response, BCH received substantial interest from practitioners, and ultimately received FY22 and FY23 TVTP grants to continue this work.

Table ES-A. Summary of Findings

Objectives	• Develop and pilot version 1 of the T-SAM.
	• Train MHPs on the T-SAM tool and provide ongoing consultations to support its application.
	• Revise the T-SAM tool and disseminate best practices based on findings.
Outputs	• Reviewed 18 TVT risk assessment tools.
	• Developed a TVT risk and protective factors dictionary.
	• Held meetings with 18 TVT and suicide prevention SMEs.
	• Developed a TVT risk assessment and management tool, the T-SAM, for community-based MHPs.
	• Assessed T-SAM usability and feasibility by gathering feedback from BCH clinicians and LAH case managers.
	• Trained 50 MHPs to use the T-SAM.
	• Held monthly LCCs with three groups of training participants for 6 months.
	• 21 MHPs participated in at least one LCC.
	• Clinicians in the LCCs used the T-SAM with 27 clients.
Outcomes	• T-SAM training participants demonstrated a statistically significant 12% increase in knowledge.
	• T-SAM training participants reported a statistically significant increase in confidence identifying, assessing, and treating clients at risk for TVT.
	• Clinician increases in confidence were sustained 6 months following the training.
Challenges	• Institutional Review Board (IRB) and DHS Compliance Assurance Program Office review of the project took longer than expected, delaying project implementation.
	• BCH recruited MHPs from a range of practice settings, resulting in variations in TVT case load and familiarity with data collection.
Recommendations	• Submit IRB materials as early as possible and incorporate buffer periods into project timelines.
	• Collaborate with other TVTP grantees to learn from prior projects and reach intended audiences.
	• Provide compensation or other appropriate incentives to improve participation and retention rates.
	• Submit complex projects in phases and lengthen the TVTP grant funding period.

Site Profile: Boston Children's Hospital

Boston Children's Hospital (BCH) was awarded a 2-year grant by the Department of Homeland Security (DHS) Center for Prevention Programs and Partnerships (CP3) in 2021 and was selected to undergo an independent evaluation by RTI International. This site profile reviews BCH's grant design,[1] implementation, accomplishments, challenges, and relevant recommendations for future programming in Targeted Violence and Terrorism Prevention (TVTP). After completing an evaluability assessment, a process and outcome evaluation was conducted on BCH's FY2021 TVTP grant, the findings of which are detailed in this report. The evaluation team examined the processes BCH followed when implementing this grant to learn what mechanisms may contribute to a project's effectiveness and detail project accomplishments at the output level. Evaluators also conducted an outcome evaluation of its Targeted Violence and Terrorism Strengths, Needs, and Risks: Assessment & Management (T-SAM) Tool training. This report examines the evaluation findings, challenges encountered, and recommendations for the TVTP grant program.

Boston Children's Hospital

BCH is one of the largest pediatric research hospitals in the United States. Within BCH, the Trauma and Community Resilience Center (TCRC) focuses on conducting research, developing interventions, and building capacity to promote the healthy adjustment of youth and families who have experienced trauma and adversity. Under one of TCRC's core work areas, Multidisciplinary Models of Violence Prevention, it has engaged in multidisciplinary research and programming for 10 years to understand and prevent youth radicalization to violence. The TCRC previously received an FY2020 TVTP grant, through which it developed the Massachusetts Area Prevention framework and established a management team that provided psychosocial services to youth at risk for TVT.

BCH implemented its grant in collaboration with a range of partners: the Cambridge Police Department Psychology Unit, Life After Hate (LAH), the McCain Institute's Prevention Practitioner's Network (PPN), and the Suicide Prevention Laboratory. The Cambridge Police Department Psychology Unit participated in the subject matter expert (SME) meetings and assisted in delivering the T-SAM training. LAH, which piloted the T-SAM tool and provided initial feedback, is a nonprofit organization that works to help individuals across the United States disengage from violent white supremacist groups through multidisciplinary intervention. The PPN is a national network of interdisciplinary practitioners focused on targeted violence and terrorism (TVT) prevention. The PPN assisted BCH in identifying mental health practitioners (MHPs) interested in receiving T-SAM training and supported Learning Community Calls (LCCs). Finally, the Suicide Prevention Laboratory, an academic center known for developing the Collaborative Assessment and Management of Suicidality (CAMS), provided guidance on suicide prevention and its translation to TVTP.

Grant Summary

BCH's FY2021 TVTP grant began in October 2021 and ended in March 2024. This period included a 2-quarter no-cost extension. BCH's grant consisted of three components, all of which contributed to the development and pilot of a semi-structured risk assessment and management tool, the T-SAM.[2] These components are described below, and Figure 1 illustrates the process that BCH ultimately followed as it completed these components.

T-SAM Research and Development. BCH engaged in a period of research to support development of the T-SAM at the beginning of the grant. The BCH team conducted a review of the literature and existing risk assessment tools to understand the risk and protective factors for TVT prior to developing their own tool. These findings were then compared with knowledge from the field of suicide prevention. In addition, BCH held meetings with 18 SMEs to discuss challenges to TVT prevention in community mental health settings and the similarities and differences between TVT and suicide prevention. The results

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from this multi-modal research were used to develop version 1 of the T-SAM.

T-SAM Training and Consultation. Following development of the T-SAM, BCH sought to train licensed clinicians in its use and gather feedback on its application through two efforts. First, the BCH project team trained four BCH clinicians and LAH case managers to use the tool. These four clinicians in turn applied the tool among their clients and subsequently provided BCH with feedback on the tool's usability and feasibility in clinical settings.

Second, BCH held a 1-day virtual training for 50 MHPs. After the training, participating MHPs were provided the T-SAM tool, along with a user guide, to use with their clients. These MHPs then engaged in monthly LCCs for a period of 6 months, during which BCH provided case consultation, facilitated discussion, and answered questions to support further learning in relation to the T-SAM. MHPs who both completed the T-SAM training and attended five out of six LCCs received a certificate of completion.

T-SAM Revision and Dissemination. The BCH team used the data collected through these two efforts under its training and consultation component to identify areas for refinement of the T-SAM tool, user guide, and training. BCH shared these data with practitioners in academic manuscripts, reports, and conference presentations, and have received interest in T-SAM training from additional MHPs as a result.

Process and Outcome Evaluation Design and Methods

Evaluators conducted a process evaluation of BCH's grant project to examine how it was implemented and how it achieved identified outputs. Beginning in March 2023, the evaluation team held regular meetings with the BCH grant team to track progress toward project objectives. Evaluators analyzed project documentation and data collected by BCH and observed the T-SAM training. Evaluators also conducted interviews with and surveyed project and partner staff.

In addition to the process evaluation for the full project, RTI conducted an outcome evaluation of BCH's T-SAM training. BCH administered a pre- and posttest for its 1-day training for MHPs held in February 2023, and a 6-month follow-up test in August 2023. The evaluation team analyzed the data produced from these tests to examine the change in knowledge and confidence in using the T-SAM among training participants.

Figure 1. BCH Component Process
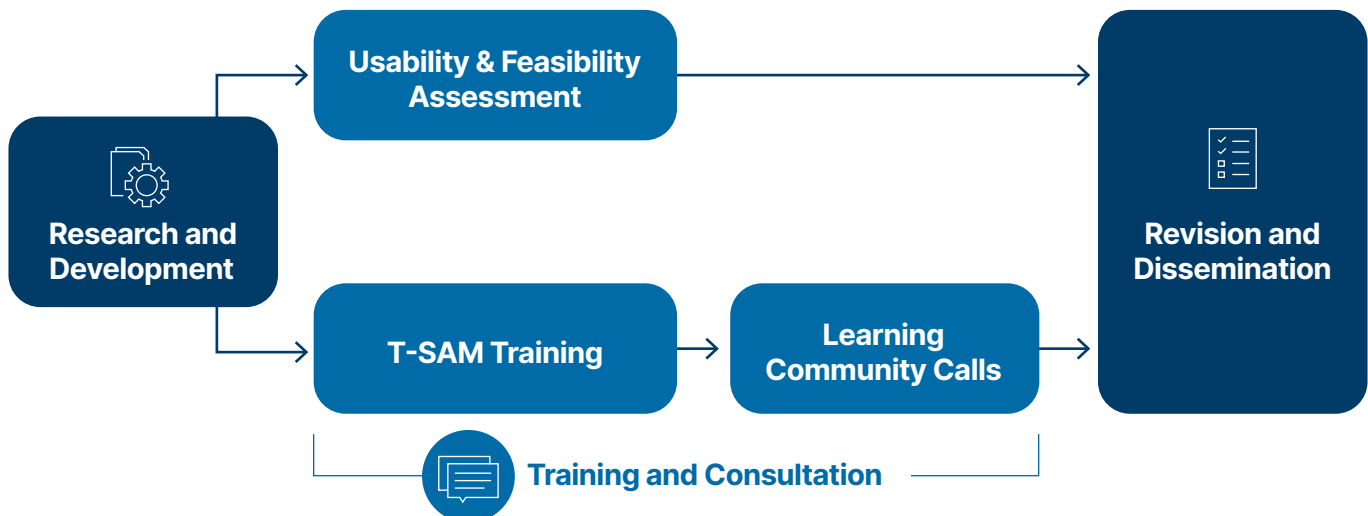
Findings

T-SAM Research and Development

This section examines process evaluation findings regarding the T-SAM research and development, which corresponds with Goal 1, Objectives 1.1 and 1.2 in BCH's IMP.

OBJECTIVE 1.1: Review of at least six existing approaches for risk, needs, and threat assessment/management.

OBJECTIVE 1.2: Develop version 1 of the T-SAM[3].

Drawing Connections Between TVT and Suicide Prevention

As noted by BCH in their grant application, the field of TVT prevention is relatively new, with little practical guidance for MHPs seeking to work with patients at risk for TVT. In contrast, suicide prevention has benefited from decades of research and assessment. Clinicians can face similar challenges when treating both suicidal and homicidal patients, including ensuring the safety of the client and concerns about clinician liability. For these reasons, the BCH team relied on the findings and best practices of suicidology to inform their approach to TVT prevention. In particular, BCH utilized the CAMS as a model in constructing their TVT risk assessment. The CAMS, developed by Dr. David Jobes, is a collaborative, flexible approach to assess and treat suicidal risk. Clinical research, including randomized controlled trial studies, demonstrates that the CAMS reduces risk for suicide in youth and adult patients receiving outpatient care.[4]

BCH Conducts Research on the Intersections Between Suicide and TVT Prevention

BCH began its project with a period of multi-method research. First, the BCH project team reviewed existing risk assessment tools for TVT, presented in Figure 2.[5] This review included an analysis of the tool itself, any trainings associated with the tool, and literature examining the effectiveness of the risk

Figure 2. Risk Assessment Tools Reviewed by BCH

- Activism and Radicalism Intention Scales (ARIS)
- Building Resilience Against Violent Extremism (BRAVE 14)
- Extremism Risk Guidance (ERG 22+)
- Historical-Clinical-Risk Management-20, Version 3 (HCR-20 V3)
- Identifying Vulnerable People (IVP) Guidance Booklet
- Islamic Radicalization 46 (IR-46)
- Level of Service/Case Management Inventory (LS-CMI) & Youth Level of Service/Case Management Inventory (YLS-CMI)
- Militant Extremism Mindset (MEM)
- Multi-Level Guidelines (MLG)
- Psychopathy Checklist Revised (PCLR)
- The Structured Assessment of Protective Factors for Violence Risk (SAPROF)
- Structured Assessment of Violence Risk in Youth (SAVRY)
- Short-Term Assessment of Risk and Treatability (START) & Adolescent Version (START:AV)
- Significance Quest Assessment Test (SQAT)
- Sympathy for Violent Radicalization Scale (SyFoR)
- Terrorist Radicalization Assessment Protocol-18 (TRAP-18)
- Violent Extremists Beliefs Scale (VEBs)
- Violent Extremism Risk Assessment 2 Revised (VERA-2R)

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3 The T-SAM was originally named the Strengths, Needs, and Risk Assessment & Management tool in BCH's IMP, but was changed to T-SAM after award.

4 Swift, J.K., Trusty, W.T., & Penix, E.A. (2021). The effectiveness of the Collaborative Assessment and Management of Suicidality (CAMS) compared to alternative treatment conditions: A meta-analysis. *Suicide and Life-Threatening Behavior, 51*(5), 882-896. https://doi.org/10.1111/sltb.12765

5 BCH was unable to obtain full access to the ERG-22+, VERA-2R, and IR-46 due to licensing restrictions. The project team reviewed academic and grey literature associated with these tools.

assessment method. Second, BCH conducted a literature review on the risk and protective factors for TVT violence. From this review, BCH developed a dictionary of risk and protective factors, including a working definition for each factor, approximate effect size, and identification as dynamic or static. These risk and protective factors were then matched with concepts used in the field of suicidal thoughts and behaviors.

After conducting the literature review, BCH convened 11 TVT and seven suicide prevention SMEs for a series of meetings. These included a session with only the TVT SMEs, only the suicide SMEs, and a combined session.[6] Each meeting was approximately 2 hours long and included discussions of current practice, challenges to TVT prevention in community mental health settings, and the similarities and differences between TVT and suicide prevention.

BCH Uses Research Findings to Develop a TVT Risk Assessment and Management Tool
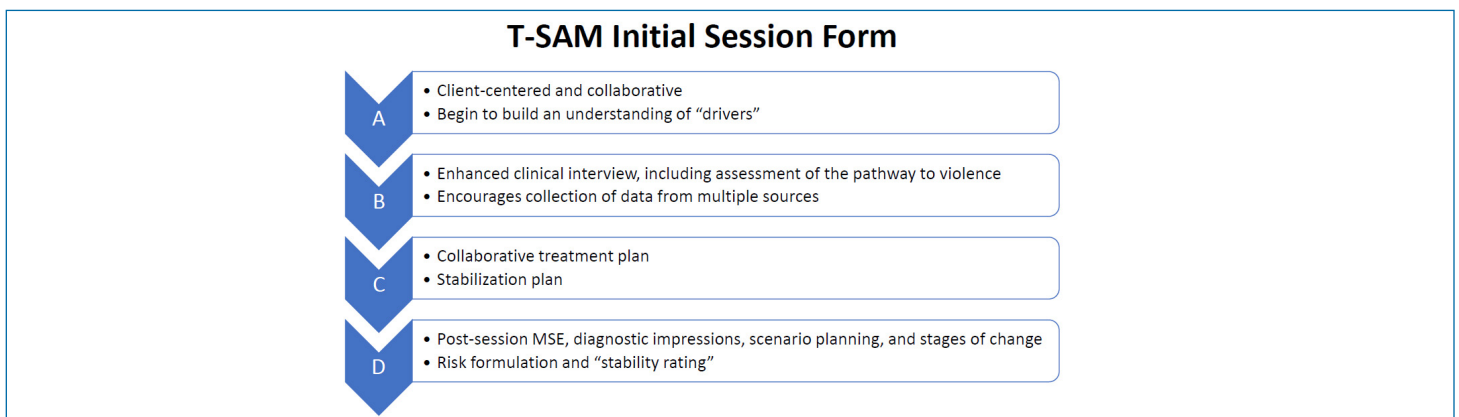
BCH's research reinforced the gap identified in its initial project proposal: clinical practitioners in community-based settings lack the tools they need to help identify clients at risk for TVT and help guide treatment. Utilizing the findings from its literature review, SME meetings, and interviews, BCH developed version 1 of the T-SAM tool. This tool uses a biopsychosocial approach to assess strengths, risk, and needs. It is guided by the fundamental assumption that, with the right supports, most people are capable of leaving violence behind.

Inspired by the CAMS, which emphasizes empathy, collaboration, and honesty, the T-SAM is a collaborative tool. This differs from a traditional assessment model in which a therapist asks questions of the client to discern a diagnosis

and determine treatment. The T-SAM's collaborative approach seeks to create a partnership between therapist and client where both work together to determine what the client needs and how to address those needs.

The T-SAM is divided into four sections. Section A consists of a client-centered assessment of core drivers. The form, consisting of quantitative and qualitative items, is shared with the client, on paper or virtually, throughout the assessment. The clinician explains the core assessment items and then engages in a conversation with the client to understand their experiences with each item in their own words. Section B consists of a clinical psychosocial interview including questions about violent ideation and behaviors; affiliation with a group, movement, or cause; internet use; identity and values; and stressors. This section can be supplemented with information from collateral contacts or reports. Section C is the collaborative treatment plan. First, the clinician must determine whether there is a need for immediate action, including a duty to warn or a need to shift to a higher level of care. If community-based services are appropriate, Section C helps the clinician and client develop a shared understanding of the client's violent drivers and develop a preliminary treatment plan and initial stabilization plan. Finally, Section D is a post-session evaluation that allows the clinician to document diagnostic impressions, risk formulations, and stability ratings.

In addition to the initial session form, which includes Sections A–D, BCH developed a Re-Evaluation form. This form is based on the client's responses to Section A of the Initial Session Form and is used to re-evaluate risk throughout treatment. Results from the Re-Evaluation form are used to modify the treatment and stabilization plans, responding to changes in the individual over time.

T-SAM Initial Session Form

A
- Client-centered and collaborative
- Begin to build an understanding of "drivers"

B
- Enhanced clinical interview, including assessment of the pathway to violence
- Encourages collection of data from multiple sources

C
- Collaborative treatment plan
- Stabilization plan

D
- Post-session MSE, diagnostic impressions, scenario planning, and stages of change
- Risk formulation and "stability rating"

Source: *T-SAM Training Presentation*

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6   BCH originally planned to hold six SME meetings. However, due to SMEs' scheduling conflicts, they held three longer SME meetings.

T-SAM Training and Consultation

This section examines process evaluation findings regarding the T-SAM training and consultation, which corresponds with Goal 1, Objective 1.3, and Goal 2, Objectives 2.1 and 2.2 in BCH's IMP.

> **OBJECTIVE 1.3:** Pilot the T-SAM in two established TVT prevention programs, one serving youth and one serving adults.
>
> **OBJECTIVE 2.1:** To provide training in the T-SAM to at least 30 community-based MHPs from at least 5 distinct locations in the U.S.
>
> **OBJECTIVE 2.2:** To provide ongoing consultation to six T-SAM Learning Communities (five community-based MHPs trained in each T-SAM Learning Community) via monthly calls.

Initial Application Illustrates Usability and Feasibility of Tool and Barriers to Administration

Following development of the T-SAM, BCH assessed the tool's usability and feasibility with clinicians in BCH's Massachusetts Area Prevention Program (MAPP) and case managers from LAH. BCH chose to collect usability and feasibility feedback from these youth-serving (MAPP) and adult-serving (LAH) programs because they regularly work with clients at risk for TVT. BCH originally planned to conduct this assessment prior to its T-SAM training for MHPs, but BCH experienced implementation delays due to privacy reviews by its Institutional Review Board (IRB) and by DHS's Compliance Assurance Program Office (CAPO), which took longer than expected. Therefore, usability and feasibility testing took place concurrently with the T-SAM training, described in the next section.

Two BCH clinicians and two LAH case managers used the T-SAM with eligible clients[7] over a period of 3 months. After this period, the clinicians completed a usability and feasibility survey containing both closed- and open-ended questions. This survey sought to understand how clinicians were using the tool and what barriers they identified while using it. All four clinicians agreed they felt comfortable using the T-SAM and that it was a valuable tool for risk assessment and management. Two participants reported barriers to administering the T-SAM, including (1) a lack of adequate time to complete the T-SAM within the duration of their sessions with clients, (2) practical

challenges in administering the form via telehealth format, (3) client resistance to participating, and (4) the need to adapt the tool's language for adolescent clients. All participants agreed or strongly agreed that the T-SAM helped them understand how to assess risk for TVT, build a treatment plan, and re-evaluate risk.

MHPs Are Trained to Use the T-SAM

BCH held a virtual training for 50 MHPs in February 2023. Thirty-five MHPs were recruited through the McCain Institute PPN and 15 MHPs were recruited because they were participants in BCH's FY2022 grant.[8] BCH required that all participating providers be clinically licensed in the United States and have an active clinical practice. Of note, experience working clinically with individuals at risk for TVT was not a requirement of participation. As such, several of the MHPs recruited for the T-SAM training did not see clients at risk of TVT as frequently as the BCH clinicians and LAH case managers who participated in the usability and feasibility assessment.

The 7-hour training began with the administration of a pretest followed by a review of TVT, the CAMS, and principles of the T-SAM. Participants then broke out into small groups to discuss the role of MHPs in violence prevention. After this small group session, BCH introduced Section A of the T-SAM. BCH performed a live demonstration of how to use the form, with one staff member role-playing as a client while another staff member filled out the Initial Session Form. Participants then broke out into small groups to practice administering Section A.

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7 Clinicians did not report how many clients they assessed with the T-SAM during this phase of the project.

8 BCH's FY2022 grant sought to establish school-based threat assessment teams in four local school districts in Massachusetts. Part of this process consisted of training MHPs in the four districts to use the T-SAM. The BCH team ultimately chose to hold one combined T-SAM training for both the FY2021 and FY2022 participants; thus, both cohorts are included in the discussion of the training and its results.

After returning from the breakout groups, BCH introduced Section B of the T-SAM. The training highlighted particular statements to listen for during the clinical interview, informed by the literature on TVT and trauma. Participants went into breakout groups again to discuss Section B. When they returned, BCH provided attendees with sample questions to guide the Section B interview.

The review of Section C focused on safety planning, with a particular focus on how to engage in lethal-means counseling with clients. This method, drawn from the field of suicide prevention, seeks to assess whether a person at risk for suicide—or in the case of the T-SAM, at risk for committing violence against others—has access to a firearm or other lethal weapon. If so, the counselor works with the client to limit the risks of that access. The BCH team highlighted the 3A Framework—Approach, Assess, Act—which provides guidance on how to have lethal-means conversations with individuals, how to assess the situation, and how to identify appropriate interventions. In the final breakout room of the day, small groups discussed the challenges of safety planning.

Finally, BCH discussed Section D. This portion of the training emphasized the need for clinicians to think of risk in the short term rather than in the long term. Participants were encouraged to develop specific interventions that are matched to the type of violence in question, and to develop dynamic risk plans. All MHPs who completed the training were provided with the T-SAM tool and a user guide, which included detailed instructions on using the T-SAM, sample scripts, and sample questions to ask clients.

Pre- and Posttests Indicate Increase in Participant Knowledge and Confidence Following T-SAM Training

Both before and after the T-SAM training, participating MHPs were directed to complete a test including six empirical knowledge-testing questions. Of the 50 participants, 47 completed both the pre- and posttest questions. Participants scored an average of 73% correct on the pretest, increasing to an average of 85% on the posttest (Figure 3).[9] This 12% increase was statistically significant, suggesting that the difference in scores was unlikely to be due to chance. BCH

suggested that participants scored high on the initial pre-test because they had prior knowledge and training about threat assessment and risk management.

In addition to knowledge gain, one of BCH's key performance measures for the training was an increase in MHPs' confidence in working with clients at risk for TVT. This was measured both before and after the training by asking participating clinicians to use a 1–10 scale to rate their confidence in identifying, assessing, and treating clients at risk for TVT. Clinicians reported a statistically significant increase in confidence after the training on all three measures (Figure 4).[10]

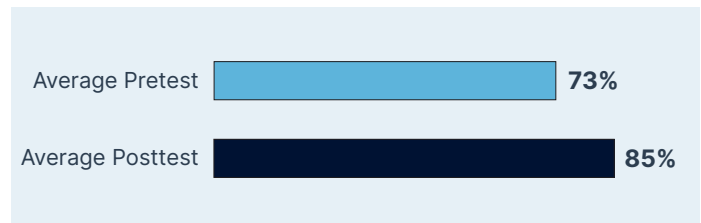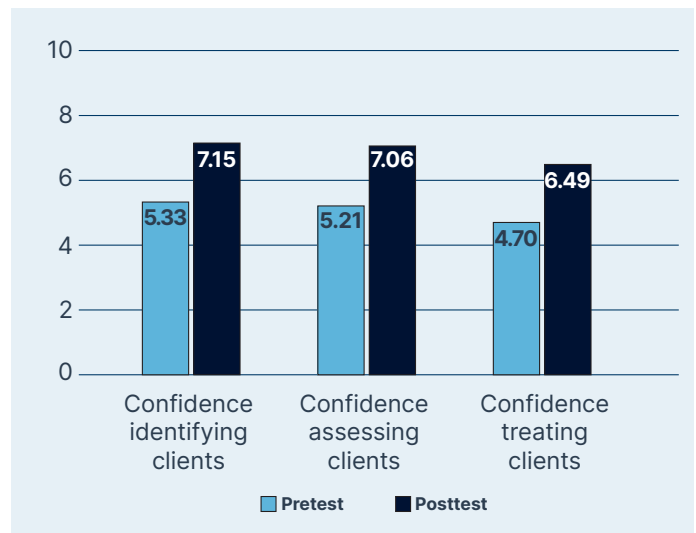***Figure 3. Aggregated Pre-/Posttest Scores for the T-SAM Training***

Average Pretest — 73%
Average Posttest — 85%

Figure 4. Clinician Confidence Ratings Before and After the T-SAM Training

	Confidence identifying clients	Confidence assessing clients	Confidence treating clients
Pretest	5.33	5.21	4.70
Posttest	7.15	7.06	6.49

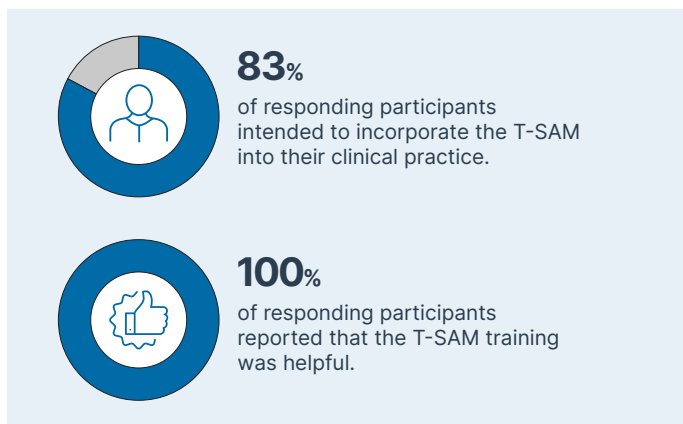9   These differences were statistically significant using paired, two-tailed t-tests (α < 0.005). This means that there is less than 0.05% likelihood that a difference of this much or greater would occur due to chance.

10 These differences were statistically significant using a Wilcoxon signed-rank test (α < 0.001). This means that there is less than a 0.01% likelihood that the difference between the observations is equal to zero.

In addition to questions measuring knowledge and confidence, the posttest included questions meant to gather participants' feedback on the training and tool. 83% of participants who took the post-training survey (N=47) reported that they intend to incorporate the T-SAM into their clinical practice, and 100% of respondents reported that the T-SAM training was helpful (Figure 5). Participants noted in open-ended questions that the training was well organized and provided valuable information. Several participants noted that, while the training laid a solid foundation, they would need more familiarity and practice to feel comfortable using the tool.

Figure 5. Participant Feedback on T-SAM Training and Tool

83% of responding participants intended to incorporate the T-SAM into their clinical practice.

100% of responding participants reported that the T-SAM training was helpful.

MHPs Participate in Learning Community Calls

Following the T-SAM training, BCH established a Learning Community Cohort, open to the 35 MHPs recruited through the PPN (the 15 MHPs recruited from BCH's FY2022 grant were not eligible to join the cohort because they were given separate opportunities to engage in capacity building). This cohort was divided into three groups, each of which was led by a BCH project team member, which met on a monthly basis from March 2023 through September 2023. During the first LCC, the BCH team introduced the Re-Evaluation Form and answered questions. During subsequent calls, participants presented cases in which they had used the T-SAM. The BCH team provided these participants with support in developing their treatment planning and in answering questions that arose. As an additional benefit, the LCCs also allowed the BCH team to engage in fidelity monitoring, learning how the clinicians were using the tool and providing guidance. A total of 21 MHPs participated in at least one LCC, with 13 attending the five out of six calls necessary to receive a certificate of completion.

The BCH team reported that experiences varied among the three groups. Given variations in the types of spaces in which MHPs worked (e.g., participating MHPs included forensic psychologists, clinicians operating in a private practice, threat assessment professionals, and clinicians operating in schools, among others), some groups had more opportunities to apply the T-SAM in their caseload and therefore engaged in more case presentations than others. By the end of the LCC period, 9 MHPs had used the T-SAM with a total of 27 clients ranging from children as young as 10 to adults. Participants in the LCCs shared that the T-SAM helped them build relationships with clients who had been hard to reach or resistant in answering other assessment tools. Some common barriers to using the T-SAM with clients that were raised during LCCs included (1) a lack of adequate time to complete the T-SAM Initial Assessment Form during a single clinical encounter, (2) client paranoia around the MHP's use of a computer to document their responses, and (3) MHPs being unsure of how to adapt the tool for each client (e.g., how to word questions for young clients). By the end of the 6 months, BCH observed that LCC participants became more comfortable using the tool and talking about their experiences over time.

BCH Collects Longitudinal Data from Participant MHPs

In addition to participating in the LCCs, cohort members provided a variety of data to the BCH team: participants filled out a monthly survey during the LCC period that gathered information about T-SAM use and shared de-identified T-SAM assessment and Re-Evaluation forms.

Unfortunately, participation in the monthly surveys declined over the course of the LCCs, from a high of 27 responses at month 1 (a 77% response rate) to a low of three responses at month 6 (a 17% response rate) (see Figure 6). Given this change in response rates, the evaluation team was unable to compare these data over time.

Clinicians submitted 30 de-identified T-SAM forms to BCH over the course of the LCCs. The BCH team found that MHPs did not consistently have time to fill out the form in its entirety with clients during their sessions, as evidenced by incomplete forms submitted during this period of data collection, echoing the barriers that BCH had identified through its LCCs. In addition, many MHPs noted only seeing the clients they identified as at-risk once or twice, limiting their opportunity to use the Re-Evaluation Form and update their treatment plan. These de-identified data, in addition to other information collected throughout the grant period, were used to understand how the T-SAM, user guide, and training content could be updated to be of further use to MHPs.

Finally, the cohort completed a final 6-month follow-up survey with MHPs who participated in the LCCs. Of the 18 participants who filled out the final survey (an 86% response rate), 100% reported that the LCCs were helpful and 83% felt that the training and LCCs prepared them to use the T-SAM in clinic. 94% of respondents agreed or strongly agreed that the T-SAM is a valuable tool for TVT risk assessment and management (Figure 7).
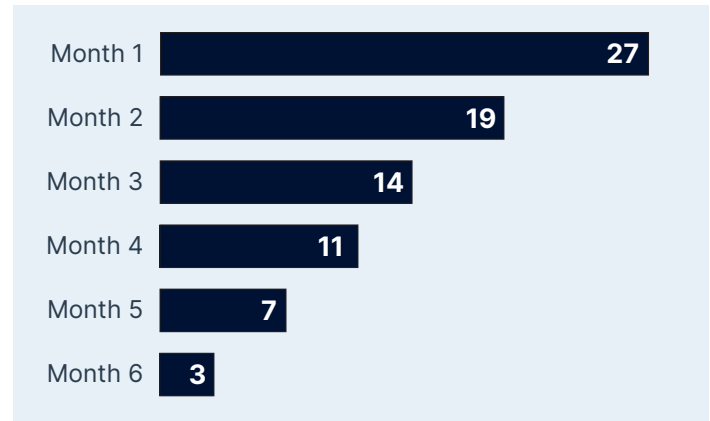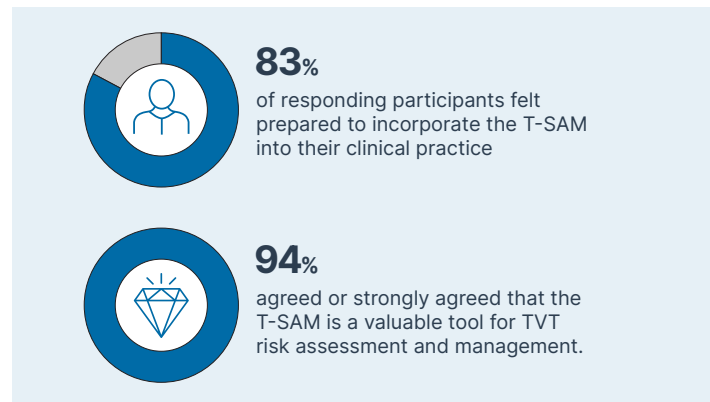
Figure 6. Monthly Survey Responses

Month 1 — 27
Month 2 — 19
Month 3 — 14
Month 4 — 11
Month 5 — 7
Month 6 — 3

Figure 7. LCC 6-month Follow-Up Feedback

83% of responding participants felt prepared to incorporate the T-SAM into their clinical practice

94% agreed or strongly agreed that the T-SAM is a valuable tool for TVT risk assessment and management.

Across BCH's various data collection efforts, MHPs identified the following barriers to using the T-SAM tools:

- A mismatch between the time needed to complete the T-SAM and the time MHPs had with their clients. For example, some MHPs needed more time to complete the form than was allotted for a client's session.
- Some clients were resistant to participating.
- Some clients with paranoia were uncomfortable with the MHPs using the tool on their computer.
- MHPs felt unsure of how to adapt the tool for each client. For example, they were unsure of how to re-word questions for young clients.
- Most MHPs only met with their clients once and therefore did not have the ability to re-assess clients using the T-SAM Re-Evaluation Form after completing it the first time.
- Administering the T-SAM via telehealth format could pose practical challenges to administering the form.

Six-Month Follow-up Shows Sustained Increase in Clinician Confidence

BCH included three knowledge-testing questions on the pretest, posttest, and 6-month follow-up survey. Only 13 clinicians completed the knowledge questions on all three tests and there were no statistically significant differences between the aggregate scores on the pretest (79% correct), posttest (90% correct), and 6-month follow-up (87% correct).[11] This result may be due to the low number of respondents.

In contrast, clinicians who completed the pretest, posttest, and 6-month follow-up did show sustained increases in confidence. Sixteen participating clinicians answered questions across all three surveys to rate their confidence levels. The difference in confidence levels between the pretest and posttest and between the pretest and 6-month follow-up were both statistically significant, demonstrating that participants experienced an increase in confidence in identifying, assessing, and treating clients at risk for TVT following the T-SAM training and that that increase was sustained over the 6-month LCC period (see Figure 8).[12]

Figure 8. Clinician Confidence Ratings Six Months Following the T-SAM Training
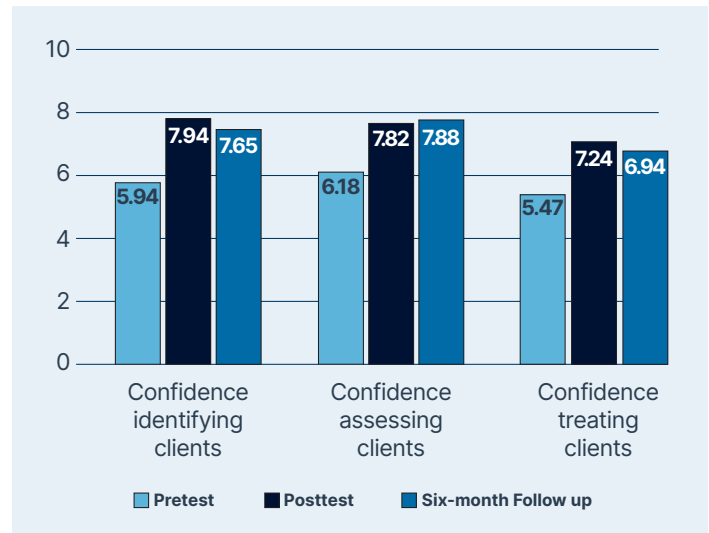
11 These differences were not statistically significant using paired, two-tailed t-tests (pretest compared to posttest, pretest compared to 6-month follow-up, posttest compared to 6-month follow-up) at the 0.10 level. This means that it cannot be ruled out that the difference between scores is due to chance.

12 The difference in confidence levels between the pretest and posttest and between the pretest and 6-month follow-up were statistically significant using a paired Wilicoxon signed-rank test (α < 0.05). This means that there is less than a 0.05% likelihood that the difference between the observations is equal to zero. The difference between the posttest and the 6-month follow up was not statistically significant.

T-SAM Revision and Dissemination

This section examines process evaluation findings regarding BCH's T-SAM revision and dissemination, which corresponds with Goal 3, Objectives 3.1 and 3.2 in its IMP.

> **OBJECTIVE 3.1:** To develop four written materials with guidelines and recommendations related to TVT risk assessment/management for MHPs/clinical agencies seeking to increase collaboration with Multidisciplinary Threat Assessment and Management Teams in their local community and to support threat management approaches.
>
> **OBJECTIVE 3.2:** Develop version 2 of the T-SAM.

BCH Introduces the T-SAM to Stakeholders

BCH developed a series of written products to introduce the T-SAM to practitioners and researchers. These included an op-ed developed with participants from the SME meetings, two project briefs[13], and two academic publications (under review as of June 2024). In addition, the T-SAM was presented at three conferences, including the 2023 Eradicate Hate Global Summit. The BCH team continued to develop research briefs and academic publications as the grant period ended.

BCH Revises T-SAM Based on Feedback

BCH updated its training materials, Administration Manual, and the Initial Assessment and Re-Evaluation Forms based on feedback collected during the project. These changes included adding results from the FY2021 project to its training presentation, developing suggested definitions to use with children and adolescents when administering Section A (in response to one of the barriers cited by MHPs), and expanding the list of example questions to guide the Section B interview. In addition, BCH added an item to the T-SAM to measure client apathy.

As discussed above, BCH collected substantial feedback from MHPs during the grant, which they intend to use to guide future iterations of the T-SAM. For example, the BCH team discussed developing a shortened version of the tool that could be used for one-time interactions or crisis response, which would alleviate two identified barriers: (1) that MHPs could not re-assess their clients because they only interacted with clients once, and (2) that MHPs did not have enough time during sessions with clients to complete the entirety of the T-SAM. In addition, the BCH team found that there was a need to develop recommendations for how to use the T-SAM with patients who

may be paranoid or have psychotic episodes, as this was cited as another common barrier to T-SAM use. BCH intends to add these features during its FY2023 TVTP grant, as described in the Sustainability section of this report.

Challenges

Delays due to IRB and CAPO review. The review and approval of BCH's research protocol by its IRB and DHS' CAPO took longer than expected, which ultimately caused BCH to request and receive a 6-month no-cost extension. These delays meant that BCH's usability and feasibility assessment with BCH clinicians and LAH case managers was conducted later than originally planned, taking place concurrently with the T-SAM training rather than prior to it. As such, they did not receive the feasibility and usability survey results prior to the training and LCC cohort in order to incorporate them accordingly.

Varying MHP capacity for LCC participation. The BCH team intentionally recruited MHPs from a variety of practice settings (e.g., schools, community clinics, forensics) for the T-SAM training and LCCs. Those MHPs with established TVTP-related caseloads had multiple opportunities to use the T-SAM. However, some MHPs did not see potential TVT clients as frequently, resulting in fewer case presentations than expected. The BCH team sought to mitigate this challenge by bringing in their own clinicians to do case presentations during LCCs. Additionally, collecting longitudinal data from some of the MHPs was challenging as not all participants were familiar with data collection practices and clinicians were not compensated for their time. While participation was strong at the outset, MHP participation in data collection efforts lessened over the course of the project. As a result, some of the collected data were not comparable over time.

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13 https://www.childrenshospital.org/sites/default/files/2024-03/trauma-community-resilience-tsam-brief.pdf; [↗]
https://www.childrenshospital.org/sites/default/files/2024-03/trauma-community-resilience-building-practitioner-capacity.pdf [↗]

Discussion

IMP Accomplishments

BCH successfully achieved their objective to review at least six existing approaches for risk, needs, and threat assessment/ management (Objective 1.1). The BCH project team reviewed 18 risk assessment tools, identified risk and protective factors for TVT, and made comparisons to the literature on suicidality. The team successfully developed version 1 of the T-SAM (Objective 1.2), drawing upon the material gathered from their research and the findings of their meetings with 18 relevant SMEs. BCH successfully piloted the T-SAM in one youth-serving and one adult-serving TVTP prevention program (Objective 1.3), with two adult-serving case managers from LAH and two youth-serving clinicians from BCH trained to use the tool, applying the T-SAM to their caseload over a period of 3 months, and completing the combined usability and feasibility survey. Clinicians did not report on the number of clients they used the T-SAM with.

BCH achieved its objective to provide training on the T-SAM to at least 30 community-based MHPs from at least five distinct U.S. locations (Objective 2.1). A total of 50 MHPs attended the virtual 1-day T-SAM training from across the United States. Of these participants, 47 (94%) completed both the pre- and posttest, exceeding BCH's goal of collecting 30 pretests and achieving a 90% response rate on the posttest. Clinicians reported a statistically significant increase in confidence in identifying, assessing, and treating clients at risk for TVT after the training, which was a key performance measure.

BCH achieved its objective to provide ongoing consultation to its T-SAM Learning Communities (Objective 2.2). Given participants' time constraints, BCH created three LCCs as opposed to the planned six, resulting in a total of 36 consultation calls from March 2023 to September 2023. While BCH aimed to have 100% of eligible training participants[14] engage in the LCCs, ultimately 21 (60%) participated in at least one call. Thirteen participants completed the necessary five calls to constitute completion. BCH collected data on clinicians' use of the T-SAM through the administration of a monthly survey (an activity not originally envisioned in the IMP), a 6-month follow-up survey, and submission of de-identified client T-SAM data. In total, trained MHPs used the T-SAM with 27 clients at risk for TVT. However, given the inconsistent

participation of clinicians in these data collection efforts, the evaluation team was not able to assess whether BCH met its performance measures related to use of the T-SAM (e.g., "90% of referred cases are managed with the T-SAM"). Data from the 6-month survey suggests that the increase in clinician confidence in identifying, assessing, and treating clients at risk for TVT using the T-SAM was sustained throughout the LCC period.

BCH met its objective to develop written materials with guidelines and recommendations related to TVT risk assessment and management for MHPs (Objective 3.1). During the course of the grant, BCH developed two academic publications, pending review, and multiple practitioner-facing briefs. In addition, both the BCH team and participating MHPs presented the T-SAM at conferences. Finally, BCH used the feedback collected from MHPs to produce version 2 of the T-SAM (Objective 3.2).

Sustainability

> The ongoing demand for T-SAM training and BCH's ability to institutionalize its use of the T-SAM are key markers indicating that the work accomplished during its FY2021 grant will be sustained by both BCH and relevant MHPs beyond the grant's completion.

BCH received significant interest in the T-SAM throughout the project period—the team was asked to hold additional trainings, and participants in the LCCs shared information about the T-SAM in presentations to colleagues. As a result, the project team developed a business plan with the hospital that allows for individual and agency-level service agreements for training and consultation. In addition, BCH is currently establishing an outpatient specialty clinic where the T-SAM will be used for assessment and treatment planning. The ongoing demand for T-SAM training and BCH's ability to institutionalize its use of the T-SAM are key markers indicating that the work accomplished during BCH's FY2021 grant will be sustained by both BCH and relevant MHPs beyond the grant's completion.

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14 Thirty-five participants were eligible to participate in LCC calls. The other 15 trainees were engaged through an FY2022 grant project.

The project team received an FY2023 grant to continue development and dissemination of the T-SAM. This will include the development of a Prevention and Practice Learning Community to create a larger T-SAM learning community across the country. BCH will also develop additional supplemental materials to support T-SAM use.

Recommendations for the TVTP Grant Program

⊘ Incorporate time for privacy processes and tasks into program design.

IRB and CAPO reviews took longer than expected, which caused BCH to conduct its pilot study at the same time as its T-SAM training. As a result, BCH noted that it planned to submit its IRB materials as early as possible during its FY2023 grant to minimize disruptions to its grant timeline. Future grantees should plan for IRB and CAPO review times by including buffer periods in the project timeline and submitting IRB materials as soon as possible after award. DHS can support grantees in this regard by continuing to promote its recently developed IRB review–related guidance[15] among prospective grantees and in discussing these timelines and how they may affect grantees once awards have been granted.

⊘ Draw upon existing partnerships and networks.

BCH successfully leveraged its networks and partnerships, including with two former TVTP grantees, to effectively implement its FY2021 grant. These relationships were critical, both in supporting and informing planned project activities and in mitigating challenges that arose. For example, BCH drew upon the McCain Institute's PPN network and on the broader network of TVTP program grantees to identify and recruit interested MHPs. Future grantees may equally benefit from forming such complementary partnerships. DHS can support such efforts by continuing to hold its annual TVTP grant symposia and using Grants Managers and Regional Prevention Coordinators to connect grantees to other relevant individuals, organizations, or networks.

⊘ Provide compensation to facilitate participation and retention.

MHPs who participated in the training and consultation calls did not receive compensation for their time. This may have impacted overall participation, as MHPs had to relinquish billable hours to participate. Future grantees may consider incorporating participant compensation or other appropriate incentives to their budget in order to improve participation and retention rates, particularly if they seek to engage professional audiences that may not otherwise be compensated for their time spent engaging in programming (e.g., MHPs, school staff).

⊘ Consider realistic grant timelines and extending the length of program funding.

When designing or reviewing grant proposals, prospective grantees and DHS should carefully consider whether anticipated timelines are realistic for the project scope. BCH noted that developing and disseminating a novel clinical tool is typically a multi-year process and the 2-year funding period left little room to adapt to unexpected challenges, such as delays due to IRB and CAPO review. If prospective grantees do not believe that it is realistic to achieve their project objectives within the 2-year time frame, they should consider proposing an initial phase of their project instead. This might include a focus on initial research and development. In turn, DHS should consider whether proposed project timelines are realistic for the activities proposed. Additionally, DHS should consider lengthening the funding period beyond two years, particularly for time-intensive projects, such as those proposing to develop novel tools. Longer timelines would provide grantees additional time to navigate unexpected challenges, collect data for longer periods of time to assess outcomes, and accommodate more ambitious projects.

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15 https://www.dhs.gov/publication/irb-faqs-tvtp-grantees-and-applicants

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