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Moving Knowledge into Action: Developing the Rapid Synthesis and Translation Process Within the Interactive Systems Framework

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Abstract

The Interactive Systems Framework (ISF) for Dissemination and Implementation presents an overall framework for translating knowledge into action. Each of its three systems requires further clarification and explanation to truly understand how to conduct this work. This article describes the development and initial application of the Rapid Synthesis and Translation Process (RSTP) using the exchange model of knowledge transfer in the context of one of the ISF systems: the Prevention Synthesis and Translation System (see [special issue "introduction" article] for a translation of the Wandersman et al. (Am J Community Psychol 41:3–4, 2008) article using the RSTP). This six-step process, which was developed by and for the Division of Violence Prevention at the Centers for Disease Control and Prevention in collaboration with partners, serves as an example of how a federal agency can expedite the transfer of research knowledge to practitioners to prevent violence. While the RSTP itself represents one of the possible functions in the Prevention Synthesis and Translation System, the resulting products affect both prevention support and prevention delivery as well. Examples of how practitioner and researcher feedback were incorporated into the Rapid Synthesis and Translation Process are discussed.

Keywords

Synthesis; Translation; Dissemination; Implementation; Violence

Introduction

The public health approach to violence prevention involves four steps: systematically define the problem, identify risk and protective factors, develop and test prevention strategies, and finally, ensure widespread adoption (CDC Injury Research Agenda 2009; Mercy et al. 1993). This approach demonstrates a process to move tested strategies for use in the field, but its intention is not to provide information on *how* this should be accomplished. The Interactive Systems Framework (ISF) for Dissemination and Implementation (Fig. 1) was developed to address the "how to" gap that exists between scientifically determining what

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works and moving that knowledge into the field for the benefit of the public (Wandersman et al. 2008).

One advantage the ISF offers to the work of violence prevention is a well thought out framework to understand the underlying systems necessary to move science to practice. The ISF connects three systems together for successful dissemination and implementation of prevention strategies. The ISF includes activities or functions that are carried out by a variety of individuals in many different roles within three distinct conceptual systems. The term "system" is used broadly to describe a set of activities that make dissemination and implementation possible. These activities include: (1) distillation (Prevention Synthesis and Translation System—PSTS), (2) support (Prevention Support System—PSS), and (3) delivery (Prevention Delivery System—PDS) (see Fig. 1). By understanding the functions of these three systems and how they interact, stakeholders (organizations, funders, researchers, and practitioners) can communicate better and work together to disseminate information and more effectively implement prevention innovations.

The Division of Violence Prevention (DVP), located in the National Center for Injury Prevention and Control (NCIPC), at the Centers for Disease Control and Prevention (CDC) has begun bridging the research-practice gap by using the Prevention Synthesis and Translation System (PSTS) to guide the synthesis and translation of the best available research evidence. For the purpose of this project, synthesis refers to an internal or external refinement of knowledge that may come from many sources. It can be a significant review of a body of key research in the form of a literature review or as simple as translation of findings from a single study. The nature of the synthesis depends upon the research questions and stated needs of the field. As an organization in the federal government tasked with the responsibility for addressing all phases of the public health approach to violence prevention, from foundational research through dissemination research, the DVP is in a unique position to streamline the process of synthesis and translation (CDC Injury Center Research Agenda 2009). For example, the Division hosts one of the largest concentrations of violence prevention experts in the world and has readily available access to past and ongoing violence prevention research and evaluation (as well as access to those scientists and researchers engaged in the work). Additionally, the Division also maintains consistent and longstanding relationships with collaborative partners in a variety of national, state, and local organizations.

The purpose of this paper is to address the challenges identified by Saul et al. (2008) in the original special issue on the ISF in the *American Journal of Community Psychology*. They described key challenges of the PSTS, such as lack of support for synthesis and translation activities and lack of clear guidance for practitioners on accessing research syntheses (Saul et al. 2008). Other historical challenges of translating evidence into practice involve the process taking a considerable amount of time (with some estimates reporting 17 years to turn 14 % of original research to benefit the community at large and coordinating both the science and practice sides of the equation (Balas and Boren 2000; Knox and Aspy 2011). The present paper addresses these themes by describing the development and initial application of a six-step Rapid Synthesis and Translation Process (RSTP). The RSTP was originally conceived as a tool for organizations that are tasked with providing the best

available science in a digestible format for the public, and that are strategically positioned with access to both the research and practice arenas. This paper first presents background information on why this process for synthesis and translation is valuable to the field of violence prevention, followed by a description of the development of the RSTP. The application and implementation of the process is described using the CDC's Rape Prevention and Education grantees as both participants and mechanisms for feedback. Finally, implications for how the process for synthesizing and translating research within the PSTS that supports both the Prevention Support System (PSS) and the Prevention Delivery System (PDS) are discussed.

Background

The primary function of the PSTS is to distill research about specific strategies in preparation for implementation in the field (Wandersman et al. 2008). The focus of traditional research knowledge channels (e.g., journal articles), concentrate on outcome and evidence of effectiveness, rather than process, and the perspective of the practitioner is rarely heard (Brussoni et al. 2006). For evidence-based strategies to have greater impact and accessibility in the practice field, it is important to consult or work collaboratively with those practitioners who will use them so that the resulting products that are distilled from science become useful to their work.

The Institute of Medicine (1994) and public health approach to prevention help identify the "what" (define the problem, identify risk and protective factors, develop and test strategies, ensure widespread adoption) that needs to occur to prevent violence. Expanding on these frameworks (IOM, PH, ISF) is necessary to begin to illuminate the 'how' that is necessary for prevention strategies to be implemented in practice settings. When information about evidence-based preventive strategies is accessible, user-friendly, and demonstrates utility, it is more likely to be successfully disseminated and implemented (Backer 2000; Backer et al. 1995; Clancy and Cronin 2005; Glasgow et al. 1999; Schoenwald and Hoagwood 2001).

Methods to accelerate and streamline the process of distilling (i.e., the process of retaining the essential features or components of something while removing nonessentials) research evidence into practice via systematic literature review and synthesis are not new. However, traditional systematic reviews can take up to 12 months or more to complete while those who need the research information, like policy makers, usually need it within 6 months or less (Ganann et al. 2010). Rapid review has been used to shorten the timeframes for delivering research evidence to policy makers and decision makers in healthcare (Watt et al. 2008). These rapid reviews typically inform health systems planning and policy development. Although rapid reviews aim to expedite the uptake of research evidence while maintaining a systematic quality, there is no standard method for conducting the reviews (Ganann et al. 2010). Other criticisms of rapid review include a higher likelihood of publication bias, the potential for missing some relevant information, and the possibility that the results may be less generalizable to a variety of practice settings (Ganann et al. 2010; Watt et al. 2008).

In a developing field that continues to build its foundational research, DVP has a unique position in that it has access to the latest in existing and emerging violence prevention science, as well as access to a wide variety of practitioners in the field. This offers an opportunity to deliver scientific information from the earliest stages of the research process to those who are currently making decisions about violence prevention practice. As Watt et al. (2008) emphasized, it is important to consult both practitioners and subject matters experts in order to align the intended purpose with applicability. By considering the needs of the intended audience, applicability is more likely to be achieved. The RSTP brings a focus to specific research questions that have relevance to the field and is the conduit for achieving a balance between research and practice.

Graham et al. (2006) describe the process of moving research to practice as *knowledge-to-action* with research synthesis and translation being one key element in the overall process of research utilization. The framework developed by Graham et al. (2006) divides the rather complex process into two distinct phases: knowledge creation and knowledge action. Both of these phases are fluid and often occur simultaneously and influence each other. In the knowledge creation phase, scientific knowledge (research) is discovered and ideally becomes more and more refined and useful to practice. A synthesis of studies relevant to a specific question helps summarize the scientific information further and finally, tools or products are developed to present the scientific knowledge in a clear, concise, and user-friendly format. The action phase involves the process that leads to implementation or application of knowledge. This process includes activities related to adaptation, evaluation, and sustainability. Both phases include communication and collaboration between both the research and practice fields (Graham et al. 2006).

Further review of the knowledge transfer literature reveals three knowledge transfer and exchange models that informed the development of the RSTP (Lavis et al. 2003; Jack and Tommyr 2008; Glasgow et al. 1999). The producer-push model describes the traditional unidirectional flow of research knowledge, which is pushed outward to the practice field. This is also described as the research-to-practice model (Klein and Sorra 1996; Landry et al. 1998; Rimer et al. 2001; Rogers 1995; Backer et al. 1995). In the user-pull model, program implementers attempt to pull knowledge from the best available research. This is also described as the user-based model (Klein and Sorra 1996). Recently, the Systematic Screening and Assessment Method was developed to systematically identify the most promising research informed strategies for childhood obesity prevention, an area with limited scientific evidence, for evaluability assessment (Dawkins et al. 2010). The exchange model offers the best of both models in that research and practice are engaged in a bidirectional exchange of knowledge. The practice field helps researchers identify work that is more relevant for practice, and researchers help the practice field build capacity to use research knowledge in decision-making (Lomas 2000). In fact, the Canadian Health Services Research Foundation adopted this model in 1998 and reported positive results in acting as a broker between researchers and the policy makers to improve evidence based decision making capacity (Lomas 2003).

Development of the Rapid Synthesis and Translation Process (RSTP)

The RSTP brings together two key elements from the ISF and knowledge transfer literature. First, the process is collaborative and multi-sector in that it was utilized with current CDC Rape Prevention and Education grantees consisting of state level health departments and sexual assault coalitions, the National Sexual Violence Resource Center (NSVRC), and teams within DVP that include science, program, and communication. Second, by using Lomas' exchange model of knowledge transfer, the RSTP bridges the research-to-practice gap by including the field from the beginning and keeping the researchers and practitioners involved throughout the process. The goal of the process is to deliver accessible and relevant information related to science and evidence that informs the work of practitioners within a short period of time. The resulting products are intended to place greater emphasis on actionable knowledge by engaging practitioners early in the process to guide the priorities of the synthesis work while simultaneously being informed by the science via researcher involvement.

The RSTP borrows from other policy and science synthesis and translation literature as well (Backer et al. 1995; Brussoni et al. 2006; Ganann et al. 2010; Graham et al. 2006; Jack and Tommyr 2008; Reardon et al. 2006; Mallonee et al. 2006; Schoenwald and Hoagwood 2001; Wandersman et al. 2008). Much of this literature related to knowledge transfer includes processes or components related to translation, although not specifically called that. Common themes which were applied to the RSTP included addressing the intended message (topic, content); who will receive it (audience, target); who will deliver it (researchers, intermediary agent); how it will be delivered (translation products); and expected impact (does the product work, evaluation) (Backer et al. 1995; Brussoni et al. 2006; Ganann et al. 2010; Graham et al. 2006; Jack and Tommyr 2008; Reardon et al. 2006; Mallonee et al. 2006; Schoenwald and Hoagwood 2001; Wandersman et al. 2008). The Robert Wood Johnson Foundation (2009) uses a similar six-step process in their Synthesis Project (http:// rwif.org/pr/synthesisabout.jsp). The goal of that project was to develop a process to make research results more useful to policy-makers. Through this process, which includes the targeted policy-makers from the first step, research information is tailored around specific policy questions. The research evidence is distilled and the policy implications are drawn from the findings. Because the process starts with those who need the information to inform policy, the synthesized products are relevant and applicable. The RSTP closely resembles the process used in *The Synthesis Project* with a slight modification by combining synthesis and distillation into one step and adding a step for translation.

As seen in Fig. 2, the RSTP is a six-step process that incorporates guiding questions and process components. The six steps are: (1) soliciting suggested topics by end-users, (2) scanning for findings, (3) sorting for relevance, (4) synthesizing results, (5) translating for end-user and, (6) review by end-user and experts.

The RSTP is designed to allow accessible and relevant information related to science to inform the work of practitioners within a relatively short timeframe of 10–12 months. Resulting products are intended to be more than routine fact-sheets, but rather products developed to not only inform the field with information derived from evidence, but to also

stimulate action. The intended primary audiences for the inaugural products of the RSTP include grantees and partners of the DVP with a focus area of sexual violence prevention. Secondary audiences include other public health professionals, state, regional, and local health department staff who receive program funding, other violence-related grantees, and policymakers.

Application of the RSTP

Using the PSTS as a guide, the DVP began developing and piloting the process to quickly move emerging scientific information from recent prevention research into action in an effort to offer Rape Prevention Education grantees, consisting of state level health departments and sexual assault coalitions, 2- to 4-page user-friendly briefs and reports. The intention of these briefs was to inform the work of state and local Rape Prevention Education grantees in their role as a support system to local programs implementing activities in the field (through the delivery system) A series of briefs were planned in an effort to test the process and whether it could be used to offer more rapid information to the field. Due to the scant availability of evidence-based primary prevention practices for sexual violence prevention, information about prevention principles and processes were synthesized and translated to inform the work of sexual violence prevention practitioners.

A series of RSTP briefs were developed for Rape Prevention Education grantees. These briefs synthesize and translate research findings on a variety of capacity issues related to program support as identified by the grantees themselves. The development of these products was a collaborative process, consistent with the PSTS and the exchange model of knowledge transfer in that it included internal and external experts from the research and practice fields. Externally, grantees working to provide Rape Prevention Education are in a unique position to engage in an iterative process of synthesis and translation, bringing the critical perspective of the practitioner to the research translation process. A detailed description of the initial application of the RSTP process can be found in Table 1.

Instrumental to piloting the process was the participation of a leadership group consisting of sexual assault coalition and state public health department representatives of grantees. The leadership group represents grantees and includes both coalition representatives and directors from state public health departments. This leadership group served as the end-user component of the RSTP (see Fig. 2).

The following section describes some of the specific inputs and outputs of this pilot process. The roles and contributions of the leadership group, the end-user groups, and the informant groups will be highlighted using concrete examples of the types of information that were exchanged and utilized. These examples are intended to further illuminate the purpose, basic features and outputs of this process rather than serve as a step by step guide to its implementation.

¹The Rape Prevention and Education (RPE) Grant Program provides more than \$42 million in funding to support rape prevention activities in all 50 states, 8 territories, and the District of Columbia. The Rape Prevention and Education Program: At A Glance, available at www.cdc.gov/volenceprevention, describes the authorizing legislation and approved uses for RPE funding and provides examples of prevention activities from various states and territories.

As depicted in Table 1, during the first call (step 1) the project lead explained the project and reviewed the process. A similar conversation was initiated (steps 2–4) with internal scientists, specifically those who were involved with the development of the ISF. Through regular communication with this group of scientists, relevant and scientifically sound literature was selected for end-user weigh in.

The end-user group offered suggestions for framing and dissemination as well as suggested other methods for gaining practitioner insight. End-users emphasized that content be kept straight-forward and basic and that a good foundation for understanding the ISF and their role as a PSS was needed prior to focusing on capacity specific topics. The concept of capacity was prioritized because a large focus of the support system is general and innovation-specific capacity (Wandersman et al. 2008). Also, the end-users thought a series of briefs that explained and simplified capacity was much needed in the practice field, where the concept of capacity may still be misunderstood. End-users found value in distilling both general capacity related to organizational structure, function, leadership, and economics, as well as innovation-specific capacity factors associated with specific strategies (staff training for a school based violence prevention initiative or resources to support family meals for a parent engagement event). This discussion led to the decision to begin the pilot series with a brief on the ISF itself to set the stage for a subsequent brief on the PSS as it relates to the role of the rape prevention grantees. Once these two foundational briefs were disseminated, a series of briefs on capacity for violence prevention would be developed. The first edition of the pilot RSTP series successfully completed the full cycle of the six steps. Feedback on the process is presented next.

Once a draft of this initial brief was reviewed by the DVP and the ISF subject matter experts, the end-user group was reassembled to offer guidance on the brief, specifically looking for relevance, language, usability, and applicability (Step 5). Some of the feedback offered included:

- Adding information boxes for a glossary of terms;
- Limiting jargon;
- Logically building on concepts from basic to complex;
- Using an appealing title, graphics, and images to draw the reader in.

The comments and suggestions of the end-user group were incorporated into the revision of the brief prior to a second review from the internal subject matter experts. Once this review and revision was complete, the content was cleared for public release and the end-user group was assembled for a final review (Step 6). End-users commented:

- I feel heard.
- I can see where the Division took what reviewers suggested and incorporated it into the RSTP.
- This process will make products like these more accessible to the field.

The process represents an efficient use of end-users' time (see Table 1). In Step 5 of the first process cycle, the end-user is also weighing on Step 1 of the second process cycle. This

layering of the RSTP cycles not only generates several briefs in a short amount of time, but it also minimizes the burden on the end-user group.

Informant Groups

Additionally, three separate informant groups resulting from naturally occurring gatherings of Rape Prevention and Education grantees, as well as a subgroup of those grantees with advanced skill and understanding of capacity for violence prevention, were assembled to provide programmatic input. IRB approval was not required for these naturally occurring gatherings of programmatic existing grantees because the information gleaned was used to inform the development of the RSTP as a public health practice. These three informant groups were not a component of the formal RSTP process, however, they provided important information that guided and confirmed that the RSTP was maintaining relevance for the field.

The purpose of each of these dialogues was to broaden the scope of informants beyond the select RPE reviewer group to ask overarching questions regarding relevant topics, accessible formatting, and dissemination strategy. The feedback from these informant groups confirmed that there is a strong need for accessible and applicable violence prevention research information.

In October 2009, the first informant group was asked what types of knowledge translation would be most useful. The responses focused on innovation-specific capacity and included defining primary prevention for sexual violence, information about healthy sexuality/healthy sexual development, risk and protective factors for sexual violence, and defining what is meant by prevention of perpetration. Once probed to think about topics from a general capacity view, suggestions included topics regarding transitioning from intervention/service delivery to prevention activities and helping organizational leadership understand this, data driven prevention, transitioning prevention strategies from the individual level to the system level, and community readiness for change.

The second informant group, assembled at the annual RPE grantee meeting in August 2010, discussed ways to make evidence informed strategies more accessible to local programs. Challenges and barriers were discussed as well as suggestions for future briefs, ideas for dissemination, and ideas for process changes to assist grantees in bridging the divide between research and practice. Suggestions included making researchers available for consultation, developing intermediate indicators of successful violence prevention, creating a platform for practitioner-researcher dialogue, and developing web-based tools and resources to assist practitioners with selecting, adapting, and using evidence-informed strategies.

The third and final informant group (a subgroup of Rape Prevention Education grantees with detailed knowledge of capacity building), gathered at the annual grantee meeting in November 2010. This group discussed both innovation-specific and general capacity needs from the point of view of those charged with the role of providing prevention support to local programs. These suggestions informed the development of the series of RSTPs focused on capacity as related to sexual violence prevention practice. Other than a resounding

suggestion to keep any publication related to capacity very basic and straight-forward, the guidance for development of capacity-related products offered during this session fell into four overarching categories:

- Determine the capacity we are trying to build—for what and why?
- Explain readiness—readiness for what and why?
- Include concrete indicators for capacity, starting with a clear definition.
- Include companion products for capacity building in the form of worksheets, tools, and resources.

Implications

The RSTP promotes actionable knowledge by articulating a process for both practitioners and researchers to engage together in the important work of synthesis and translation. The multi-sector group may potentially involve scientists and researchers from all across the DVP as well as external researchers and practitioners. Use of this collaborative process has resulted in products that resonate with the PSS for sexual violence prevention, specifically state level public health departments and sexual violence coalitions. The process has also opened up a channel of communication between those who practice violence prevention in the PDS and those who are involved in the scientific work of building the evidence base for the prevention of violence. For example, scientists engaged in the work of research and evaluation of capacity benefit from the stories of the real-time struggles practitioners face when assessing and prioritizing prevention capacity within organizations and communities. The RSTP also offered the DVP an opportunity to prioritize translation of information that was identified as relevant.

The RSTP offers a systematic process that draws from research and practice to create products that are scientifically sound and relevant to real-world practice. The RSTP holds promise for organizations with access to both researchers and practitioners for increasing the uptake of products promoting evidence-informed strategies by drawing from both the research and practice fields to generate products that will actually be usable by the field. For DVP specifically, the RSTP products strengthen CDC's role as a support system to their grantees and builds capacity for the primary prevention of sexual violence via concise and user-friendly products. The products also serve as a resource to include in web-based violence prevention tools, such as the CDC VETO Violence² web resource, a portal for practitioner friendly violence prevention training and technical support developed by the DVP.

The RSTP offers organizations with access to both researchers and practitioners a process for more rapidly cycling through the six steps of synthesis and translation both concurrently and consecutively with each other. While one RSTP product is being reviewed for messaging accuracy (Step 5), another is being reviewed for topical relevance for the field (Step 1). Therefore, by utilizing the RSTP, several synthesis and translation products can be in development simultaneously with each of them garnering the benefit of cycling through

²Violence Education Tools Online; www.vetoviolence.org.

every step in the RSTP. Additionally, for a series of RSTP products that build upon the previous edition, the RSTP offers a systematic way to take what is learned from the development of the previous edition and apply it to the next in a timely, efficient manner. This process offers scientists a perspective that informs their research early on which could increase the likelihood of a more rapid and consistent uptake in the field.

Limitations and Challenges

An obvious limitation to be addressed with the RSTP is that it is in the early stages of application and therefore will benefit from continued refinements and empirical investigation. Consistent systematic application is required, including the iterative feedback built into the process, to continue to refine the process for generalizable application. It is not yet known if the process is, in fact, generalizable to synthesizing and translating other content and practice areas of violence prevention. Differences in practitioner, field culture, or state of the science may make it impossible to implement all components, most notably the "rapid" nature of the process as well as the inclusion of both research and practice throughout. Some areas of violence prevention may not be ready to support all of the foundational processes which make the process unique.

In the formative stage, the intention for rapid synthesis and translation was 3–4 months. We learned that, as is often the case in a large national agency with many grantees, the development and review process is not precise and could take as long as 10–12 months. Setting clear expectations for all participants regarding timeframe is important for continued participation in the RSTP. Therefore, adjustments were made regarding expected timeframes throughout the process.

Although the RSTP was developed to address the challenges raised by Saul et al. (2008), namely support for synthesis and translation activities and clear guidance for accessing research synthesis, it also raised questions regarding these and other challenges in the work of bridging research and practice. The process for piloting the RSTP provided a rich, narrowly-focused opportunity to learn more about how to create better exchange between research and practice. While the target audience for accessibility and support for synthesis and translation were practitioners, it was learned early on that researchers should be included in every step along the way. As we began with Step 1 for the first RSTP product, the discussion was limited to only practitioners. This left the research side of the gap unable to weigh in on feasibility and reliability questions regarding the proposed translation products themselves. The process was adjusted to be more inclusive from the first step through the last, which resulted not only in more buy-in from those who drive the science, but a robust dialogue between those who research and those who practice.

The RSTP was developed by the DVP taking into account its access to both researchers and practitioners and is discussed within this specific experience in this paper. The RSTP may be a process that has broader utility to organizations that serve in a support role with access to both the science and the field. This is the element in the RSTP process that addresses the common difficultly for non-research based organizations to pursue because they may not have access to the literature, nor do they necessarily have the competencies or time to do the

reviews. Similarly, organizations that are exclusively research based without access to practitioners in the field may find it difficult to offer actionable knowledge for the field as well because they lack the practical insights and needs provided by practitioners. The RSTP brings the strengths of both together to create accessible scientific information to inform practice.

Additionally, this paper discussed the experience of the DVP during the synthesis and translation of a single series of selected topics. Dissemination and evaluation of such was not within the scope of this work. Although it was assumed that end-users served as embedded dissemination mechanisms for the final product, a more formal assessment of reach and impact would be a beneficial next step to fully understand how and in what ways the RSTP can facilitate the necessary exchanges between research and practice.

Conclusions

While the ISF offers a framework to address the gap between research and practice, the RSTP offers clear steps in the synthesis and translation process to make knowledge actionable via interaction with both the PSS and the PDS. By refining the process based on the iterative feedback from both researchers (and originators of the ISF framework) and practitioners, we created products that are intended to be useful to practitioners as well as other scientists (see [special issue "introduction" article] for a translation of the Wandersman et al. 2008 article using the RSTP). Further testing of the utility and reach of these products is a required next step. The RSTP has utility for the work being done by those in both the PSS and the PDS. Participation in the process has the potential to generate acceptance and uptake of the products by those who serve in support and delivery roles of dissemination and implementation of violence prevention. This bridging offers a unique communications opportunity that holds the potential for informing both current practice and future research. The intent of the RSTP was to build that as well as to hear directly from the field what was relevant for future translation efforts. Through the development and application of the RSTP, a systematic process for synthesis and translation was created that illuminates the inner-workings of the PSTS and brings together the perspective of those who use research with those who do research.

For next steps, other stakeholder audiences will be engaged in the RSTP to refine and make improvements in the process. The model has not yet been formally evaluated and future interactions with stakeholders provide an opportunity to conduct more thorough examinations of various aspects of the model's utility. Evaluation of the RSTP is needed in terms of utilization of the products developed, i.e., do RSTP-developed products actually change practice and/or uptake more or in different ways than traditionally developed products? Additionally, the RSTP has helped to establish other dissemination and implementation research questions, such as: Is this a process that can be implemented and sustained by other state or local level entities? How transferrable is the process to other areas of violence prevention? Is this applicable to other federal agencies struggling to bridge the research-to-practice gap? Can this process actually increase or enhance the uptake of evidence-based strategies by practitioners? These and other questions will be explored as the process continues to be implemented and refined.

Abbreviations

RSTP Rapid Synthesis and Translation Process

ISF Interactive Systems Framework

PSTS Prevention Synthesis and Translation System

PDS Prevention Delivery System
PSS Prevention Support System

CDC Centers for Disease Control and Prevention

NCIPC National Center for Injury Prevention and Control

DVP Division of Violence Prevention

RPE Rape Prevention Education

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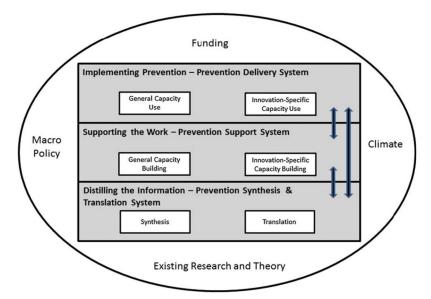


Fig. 1. The interactive systems framework for dissemination and implementation (Wandersman et al. 2008)

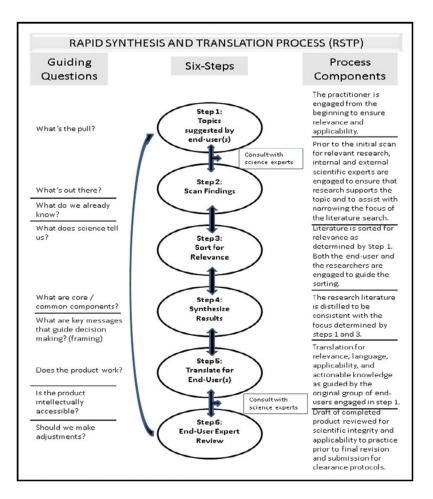


Fig. 2. The Rapid Synthesis and Translation Process (RSTP)

Table 1

Simultaneous flow of multiple RSTPs

RSTP #2: PSS

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Process Milestones	Practitioner Reviewer Call	Review of scientific literature/	Practitioner Reviewer Call	Refine, scientific review/refine/enter	Practitioner
	#1	Science Reviewer Group	#2	formal clearance	Reviewer Call #3
Abbreviated Timeline					
	October 2009	November-March 2010	April 2010	May-September 2010	November 2010
Step 1	Practitioners began generating ideas for Pilot RSTP #1	Researchers identified areas with evidence/science from practitioner brainstorm	Practitioners began generating ideas for Pilot RSTP #2	Researchers identified areas with evidence/science from practitioner brainstorm	Practitioners began generating ideas for Filot RSTP #3
Step 2		Researchers suggested available science for review		Researchers suggested available science for review	
Step 3		Literature sorted by relevance to the field (audience) as determined in Step #1		Literature sorted by relevance to the field (audience) as determined in Step #2	
Step 4		Relevant literature synthesized		Relevant literature synthesized	
Step 5			Synthesis translation draft review	Content revised, internal review, content cleared	Synthesis translation draft review
Step 6					Cleared, formatted RSTP #1 final review by end-user

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