EXECUTIVE SUMMARY

With funding from the Centers for Disease Control and Prevention (CDC) Office for State, Tribal, Local and Territorial Support (OSTLTS), and subcontracts through the American College of Preventive Medicine, the Safe States Alliance and the Society for Advancement of Violence and Injury Research (SAVIR) oversaw the development and implementation of a cross-center thematic network focused on furthering the injury and violence prevention (IVP) field's strategy around an emerging IVP issue. The network consisted of four Injury Control Research Centers (ICRCs) working together to create products and advance policy recommendations; establish a model demonstrating collaborative effort to translate the evidence base; and document lessons learned for future networks working to advance IVP with fellow ICRCs, state health departments, and other stakeholders.

Through a competitive Request for Applications process in September 2016, funding was awarded for a translational research network focusing on opioid overdose prevention led by Dr. Shannon Frattaroli at the Johns Hopkins Center for Injury Research and Policy (JHCIRP). JHCIRP served as the Coordinating Center, and the Collaborating Centers (University of Iowa Injury Prevention Research Center, University of Michigan Injury Center, and West Virginia University Injury Control Research Center) were chosen by JHCIRP based on their previous efforts around the opioid epidemic.

Over the course of six months, the network:

- Developed an updated version of an earlier report, "The Prescription Opioid Epidemic: An Evidence-Based Approach," summarizing best available research evidence and making recommendations to key stakeholder groups in the opioid epidemic effort;
- Shared the status of their state-specific efforts to translate prescription opioid prevention priorities to policymakers and other stakeholders during a May 2017 Translation Symposium;
- Coordinated state-specific stakeholder meetings and identified dissemination event opportunities in all four project states; and
- Developed actionable guidelines to inform future efforts in the field.

The ICRC Thematic Network process evaluation assessed the ICRC thematic network's development and implementation activities, and how they enhanced cross-center collaborative processes and products. The evaluation explored four overarching questions:

- 1. How did ICRC networks organize themselves, set goals, and carry out their work?
- 2. What processes, logistical supports and activities, and structures: helped network members work effectively toward their consensus goals; facilitated active collaboration among thematic network members; and supported the development of network products?
- 3. What challenges did network members encounter while participating in the thematic network? How were these challenges addressed and/or overcome?
- 4. What recommendations do participating ICRCs have for future networks?

Key findings are summarized below.

Organization, goals, and work structure	•	Goals and activities were outlined by the Coordinating Center
		in the initial proposal

	 All Centers were responsible for assisting the network's goals, in addition to their individual activities ICRC leadership was heavily involved in project activities Other staff included policy consultants and communications specialists to achieve project goals
Logistical supports, activities, and facilitators	 Regular communication, largely via conference call, kept project activities on track Existing stakeholder networks allowed for immediate and timely engagement Peer-learning enhanced quality of and process for developing network products High involvement of Coordinating Center clarified roles and furthered deliverables
Challenges	 Project timeframe was too short and rushed development of project deliverables Lack of in-person meeting scheduled early in the project period Staffing the project to ensure completion of products was difficult given the scope of work and short project duration Lack of project benchmarks did not provide adequate structure for network

Recommendations for future networks include:

- Extend the project's timeline to at least two years;
- Build in time and funding to convene network members in-person at the project's outset;
- Continue to allow network Centers to organize themselves and choose their partners;
- Establish network benchmarks to ensure project progress;
- Adjust the administrative timeline to account for a longer application process, contracting activities, and evaluation at the conclusion of the project;
- Align project activities to a framework stressing network goals and a collaborative process, allowing sufficient time to also complete individual Center products and accomplishments; and
- Project design and oversight should continue to be a collaborative process of multiple, complementary perspectives represented in project leadership and organization.

INTRODUCTION

The Injury Control Research Center (ICRC) Thematic Network Formation project (henceforth referred to as "ICRC Thematic Network") was initiated to further the injury and violence prevention (IVP) field's thinking and strategy around emerging and critical challenges in the IVP field. Funded through the Office for State, Tribal, Local and Territorial Support (OSTLTS) mechanism with National Center for Injury Prevention and Control (NCIPC) funding, this project convened four ICRCs to form a collaborative, structured network to leverage the collective expertise of leading injury and violence prevention researchers and scientists to develop a research agenda, road map, or other deliverables around translating evidence-based prescription opioid strategies to policymakers and other stakeholders. The development and collaborative structure of the network was also intended to serve as a pilot for the development of future ICRC networks. The ICRCs worked together to: create products and disseminate evidence regarding policy and program solutions for the opioid epidemic; provide a model for how to translate evidence through a collective stakeholder effort; share actionable guidelines to assist future efforts in the field; and provide insight into and alternative, innovative mechanisms as to how ICRCs, state health departments, and other stakeholders could better work together to advance IVP.

Project Partners and Roles

Through subcontracts from the American College of Preventive Medicine (ACPM), the Safe States Alliance and the Society for Advancement of Violence and Injury Research (SAVIR) led the development and oversight of the cross-center thematic network.

ACPM is the national professional society for physicians committed to disease prevention and health promotion. ACPM was established in 1954. Its 2,700 members are engaged in preventive medicine practice, teaching and research. They have the skills needed to understand and reduce the risks of disease, disability and death in individuals and in populations. ACPM's role in the network included grant oversight and management.

The Safe States Alliance has a 23-year history of providing national leadership, setting standards, assessing state programs, evaluating multi-state initiatives, and providing technical assistance, training, and support to injury and violence programs within state, local, and tribal health departments. Safe States Alliance's roles in the ICRC Thematic Network project included overseeing the development and contractual coordination of the thematic network; documenting the methodology and lessons learned through the thematic network; and disseminating findings.

SAVIR is a professional organization that provides leadership to advance the science of violence and injury prevention research and practice. First established in 2005 by CDC-funded Injury Control Research Center Directors, SAVIR's Board, Centers, and members now represent leading national and international researchers in injury and violence prevention. SAVIR's roles in the ICRC Thematic Network project included overseeing the content and logistical coordination of the thematic network; participating in the development and implementation of plans to document the methodology and lessons learned through the thematic network; and disseminating findings.

ICRCs

ICRCs are high-impact centers, funded by the National Center for Injury Prevention and Control,

dedicated to quality research, training the next generation of researchers, and providing outreach to state health departments, community partners and other stakeholders.

Research: Studying Ways to Prevent Injuries and Violence. ICRCs are on the scientific front line conducting cutting-edge, multidisciplinary research on the causes, outcomes, and prevention of injuries and violence. ICRC research focuses on issues of local and national importance including motor vehicle injuries; interpersonal violence and suicide; opioid overdoses; older adult falls; and traumatic brain injuries.

<u>Training: Building the Field.</u> ICRCs play a critical role training and developing the current and next generation of researchers and public health professionals. This helps ensure there is an adequate supply of qualified practitioners and researchers to advance prevention research, address new problems, and reach new populations across the nation.

<u>Outreach: Putting Research into Action.</u> ICRCs work with states and communities to ensure research is put into action to prevent injuries and violence. They provide technical assistance to disseminate and translate research findings which leads to increased awareness and action.

Process Evaluation

The purpose of the ICRC Thematic Network process evaluation was to assess to what degree the ICRC thematic network's development and implementation activities enhanced cross-center collaborative processes and products. This evaluation outlines the methodology, processes, and lessons learned from the execution of the thematic network, ultimately serving as guidance for future ICRC network efforts.

This evaluation explored four overarching questions:

- 1. How did ICRC networks organize themselves, set goals, and carry out their work?
- 2. What processes, logistical supports and activities, and structures:
 - a. Helped network members work effectively toward their consensus goals?
 - b. Facilitated active collaboration among thematic network members?
 - c. Supported the development of network products?
- 3. What challenges did network members encounter while participating in the thematic network? How were these challenges addressed and/or overcome?
- 4. What recommendations do participating ICRCs have for future networks?

Data collection to inform the evaluation came from four sources (see Appendix A for detailed description):

- Kick-off conversation with Coordinating Center, Safe States, SAVIR, and CDC
- Monthly check-in calls with the Coordinating Center, Safe States, and SAVIR
- Mid-point online survey of all four participating Centers
- Wrap-up discussions with all four participating Centers

THEMATIC NETWORK DESCRIPTION

Network Development

Through a collaborative process, Safe States Alliance, SAVIR, and ACPM, as well as NCIPC staff developed project goals, identified project approaches, developed a Request for Applications, and solicited submissions for pre-identified networks of a minimum of four ICRCs in September 2016. Five networks representing nine of the ten ICRCs submitted applications. Through a competitive review process, funding was awarded for a translational research network led by Dr. Shannon Frattaroli at the Johns Hopkins Center for Injury Research and Policy (JHCIRP) focusing on opioid overdose prevention. The Collaborating Centers, named in the application submission, were chosen by JHCIRP based on their previous efforts and engagement around prescription opioids.

Project Activities

The three goals established by the Coordinating Center for the network included:

- 1. Create products and distribute evidence regarding policy solutions for the opioid epidemic;
- 2. Provide a model for how to translate evidence through collective effort; and
- 3. Examine network lessons learned to identify how ICRCs, state health departments, and other stakeholders can better work together to address the opioid crisis.

The thematic network met monthly via teleconference to: establish current research and practices around prescription opioid overdose; identify research and practice needs; identify key stakeholders; develop actionable guidelines to steer future efforts; and document their process and lessons learned for future thematic networks.

In addition to joint network activities, each individual Center engaged in the following activities:

- 1. **Stakeholder outreach**, including forming a state-based stakeholder collaborative; convening a state-based stakeholder meeting; and building/strengthening stakeholder relationships;
- 2. **Policy activities**, including creating state-specific policy recommendations; meeting with experts and stakeholders to gather input for policy recommendations; cataloguing current and upcoming opioid legislation; and holding informational meetings with lawmakers; and
- 3. **Creating products for dissemination**, including new or updated state-level prescription opioid reports and a network recommendations and actionable guidelines document.

The Coordinating Center was responsible for oversight of individual Collaborating Center activities and goals; updating the Johns Hopkins' report, *The Prescription Opioid Epidemic: An Evidence-Based Approach*, for use among and feedback from network members; incorporating Collaborating Centers' feedback into the report; coordinating communication among network Centers; planning the *Action Through Collaboration: 2017 Injury and Violence Prevention Translation Symposium*; and working with SAVIR and Safe States Alliance to report progress, discuss challenges to network activities, and inform the process evaluation.

The Collaborating Centers (University of Iowa Injury Prevention Research Center, University of Michigan Injury Center, and West Virginia University Injury Control Research Center) were responsible for activities both at the network-level and within their own ICRCs and state, including active participation in network activities and meetings; providing input on the *Prescription Opioid Epidemic* document; convening stakeholders to establish state-level collaboratives; creating state-specific reports; participating in the Translation Symposium; and informing the process evaluation.

Outputs

The Coordinating Center built on a consensus process undertaken in 2015 to update their evidence-based, expert-written report, *The Prescription Opioid Epidemic: An Evidence-Based Approach*. The report collates the best available research evidence around strategies for key stakeholder groups to reduce opioid overdose and abuse, and was shared with each Collaborating Center for input and revision. Each state produced a state-level report and identified dissemination plans in preparation for their respective 2017 legislative sessions. Finally, network members produced actionable guidelines for other networks engaged in translation.

EVALUATION FINDINGS

How did ICRC networks organize themselves, set goals, and carry out their work?

The JHCIRP applied for the funding opportunity with a pre-identified, self-organized network. Originally, Safe States, SAVIR, ACPM and the NCIPC considered a model similar to that of the CDC-funded Prevention Research Center (PRC) networks, in which Centers apply individually, are grouped into networks by the funder, and then build their networks from the ground up by collectively identifying how to operate and which topic to pursue. However, the ICRC thematic project pilot was more constrained for time, contributing to the decision to allow Centers to organize themselves into networks as part of the application process prior to the thematic network award. As such, The Coordinating Center submitted one application on behalf of their four-Center network that outlined the general project goals, approach, and topic. JHCIRP sought input regarding project operations from Dr. Keshia Pollack, a leader of the PRC at the Bloomberg School of Public Health, and reached out to the three Collaborating Centers to form their network. JHCIRP took primary responsibility for developing project goals, to which the Collaborating Centers could react and provide feedback.

Notably, network participants cited the size of the IVP field as facilitators to organizing their networks and quickly beginning project activities. Namely, the small size of the field meant that all funded Centers were already familiar with each other's staff and work, and thus could quickly organize into a collaborative.

The proposal submitted by the Coordinating Center served as the framework for directing Collaborating Centers' activities, and was supported by strong foundational knowledge of the topic already in place at all four ICRCs. The project's short timeline precluded a formal planning phase, so logistical supports already in place, rather than newly developed activities and structures, helped the project efficiently move forward. For example, each ICRC, in addition to participating in the Thematic Network, had its own local network of stakeholders with whom it engaged in state-specific opioid issues.

As described in the network's proposal, the Coordinating Center was responsible for developing the network's infrastructure, as well as ensuring the project's activities and deliverables were completed. Each Collaborating Center contributed to the achievement of the network's goals through stakeholder engagement, policy and program activities, and product development and dissemination. Each Center was equally tasked with establishing a state-level network of experts and other stakeholders—and, eventually, a national stakeholder network—to assist with development, feedback and dissemination

activities for the network's products. Policy activities included assessing the current state of opioid policy in each state, soliciting input from stakeholders on policy directions, and devising policy recommendations for use in the network's deliverables. Regarding project deliverables, the Coordinating Center was responsible for updating *The Prescription Opioid Epidemic: An Evidence-Based Approach* report with input from the Collaborating Centers. In addition, each state developed or updated its own state-level prescription opioid report.

Network members varied in how they divided tasks among their internal teams, though some similarities among Centers emerged. All network teams included at least one Project Investigator (PI) and Co-PI, and each team identified a Project Manager. Generally, the PI and Co-PI were responsible for maintaining connections with the network through participation in regular teleconferences and meetings. Each network member's Center leadership participated in the project, and was responsible for stakeholder outreach and networking, as well as expert input for deliverables. Project Managers were responsible for a variety of project oversight activities, including internal team coordination, facilitating communications and dissemination, monitoring the project timeline, and organizing network activities. Other Center staff involved in the project included epidemiologists, communications specialists, and policy consultants.

What processes, logistical supports and activities, and structures: helped network members work effectively toward their consensus goals; facilitated active collaboration among thematic network members; and supported the development of network products?

Centers noted that their **existing portfolio and networks** helped move the project's activities along, specifically with regard to stakeholder engagement. Centers felt it was helpful to leverage existing resources as a means to use their time more effectively, rather than starting from scratch. In addition, the opioid epidemic document provided by the Coordinating Center served as a basis for conversations with stakeholders and Collaborating Centers, and gave network participants a starting point for creating their own state-level reports.

Monthly phone calls with the entire network were valuable to Centers, as they gained insight about diverse approaches to the opioid epidemic across states. Additionally, Dr. Frattaroli held at least one individual call with each Collaborating Center's PI to clarify questions, establish that activities were on track, and confirm responsibilities with each Center. One Center reported that the Coordinating Center's ongoing availability to discuss concerns and questions was useful as the project progressed. Establishing a standing meeting time was essential to ensure the network communicated on a regular basis, despite busy schedules.

While the phone meetings were valuable for keeping project momentum, many network participants cited the great value of their **in-person meeting** for energizing the network and enhancing communication across Centers. One Center noted that it facilitated the relationship-building between individuals, which made it easier to discuss, disagree, and be constructive with one another in subsequent interactions. Many felt that in-person meeting opportunities should be prioritized and occur early during the project timeframe for future networks.

Active collaboration and product development was facilitated by the ability for Centers to **learn from their peers**, whose states differ both in the severity and characteristics of the opioid epidemic and in the scope of their approaches. The Coordinating Center reported that the efficiency of the project was accelerated

due to network Centers learning from not just one, but three, of their sister Centers. Having four varied points of view provided valuable insight and prompted new ideas. Having the **right people at the table** is essential to the successful completion of activities at each participating site and to the overall network performance.

The IVP community is fairly small, and the ICRC community even smaller. As such, Centers were familiar with the people with whom they were working, even if they had not professionally partnered on a project prior to the Thematic Network. Engaging in similar work, belonging to the same national groups and initiatives, and sharing professional contacts lent a sense of familiarity to project participants, even those who had not met in person. This familiarity allowed partners to be more forthcoming with their conversations, ultimately allowing them to collaborate more easily and move the network to develop strong, consensus-based products.

What challenges did network members encounter while participating in the thematic network? How were these challenges addressed and/or overcome?

The most frequently cited challenge among network participants was **time**. The project's six-month timeline posed difficulties to participants in several ways. First, finding time to participate in network conference calls was problematic, given competing priorities and participation from a team of individuals in each ICRC. To address this challenge, the network set a standing meeting time, and the Coordinating Center also conducted individual outreach with each Collaborating Center. In addition, two Centers reported difficulties in gathering a diverse group of stakeholders for their individual state efforts in a short amount of time. One Center used their networks in local health departments and local boards of health to identify appropriate stakeholders, while another identified alternates for their stakeholder meeting attendees in case the primary member could not attend. A third Center addressed this issue by holding several meetings instead of one large meeting, and by joining the agenda of pre-existing meetings with similar themes and stakeholders. The Coordinating Center used its partner network to create momentum around the project in an effort to convene stakeholders and generate ideas for wider reach.

A contributor to schedule challenges was a **lack of staffing**. One Center reported that a dedicated staff member was essential to completing tasks, but the hiring process in their institution slowed the process considerably. They worked with the human resources department to fast-track the staff member's hiring process, completing some of the required activities before the official hire.

Lack of time also manifested in a sense of missing the spirit of the opportunity. That is, some Centers felt as if they spent all their project time completing tasks rather than building relationships among network members. In addition, network calls were spent sharing task information rather than brainstorming about how to make the network's activities more effective or thinking creatively about guidance for the field. One Center reported that relationship-building was an afterthought, especially as the short timeline precluded an in-person meeting until the Translation Symposium in May, two months before the conclusion of the project period. However, engagement among network Centers at the symposium was high, and the Coordinating Center reported that they felt that meeting in person was pivotal to the project's wrap-up activities. Finally, the project's start in mid-December resulted in nearly a month of planning time lost due to the holidays and staff vacations. Had the network had more time, this would not have been as significant a detriment.

Different timelines—that is, lack of uniformity in project progress across all four Centers, largely due to working across four different legislative session timelines—posed some difficulties in engaging with network Centers to accomplish overall goals. Network activities were not always occurring simultaneously from Center to Center, resulting in some misalignment in structure. For example, all four Centers could not discuss the outcomes of their stakeholder events at the same time, as some were experiencing difficulties scheduling meetings. As a result, some Centers felt that cross-center collaboration wasn't appropriate until later in the project's timeline.

Specific to the topic of this particular network, one Center reported **difficulty finding centralized sources of opioid policy and legislation** in their state. Due to the quickly-changing landscape of the opioid epidemic, as well as the myriad stakeholders involved, information sources may be incomplete or outdated. The Center reached out to its local network of stakeholders, as well as the Thematic Network, for assistance with this activity.

What recommendations do participating ICRCs have for future networks?

All Centers recommended a **longer timeline** for the Network's activities; specifically, a collaborative project of this type should be funded for **at least a full year**. Due to the six-month timeline, network members were not able to meet in person until nearly the end of the project. All Centers recommended that **time and funding be built in** to hold an **in-person**, **full-day planning meeting** at the project's beginning to clarify goals, expectations, and activities. Meeting in person early could provide the **opportunity to catalogue each Center's expertise and discuss ways to capitalize on their strengths**. For example, one Center reported a heavy physician presence in their environment, resulting in a substantial focus on opioid laws regulating physicians. Their proficiency in this area could be harnessed by their network partners to move efforts forward at other centers. Along with a face-to-face kickoff meeting, one Center noted that **a second in-person meeting at the end of the project** would be helpful for wrap-up and translation activities.

A longer timeline would also result in more flexibility to respond to opportunities that arise around the network's theme, such as legislative interest or national conferences. Relatedly, a project with activities planned around legislators and/or their staff must be given a wide berth for scheduling, as it can be difficult to find time to meet with them.

Clarity of expectations and deadlines should be communicated early in the project. The Coordinating Center suggests arriving at collective agreement about the project's outputs and schedule at the project's outset and having each network Center sign an acknowledgement signifying a common understanding. In addition, clarity of goals could assist with maintaining project momentum. ICRCs with vague target dates were reported by some of their peers to be less focused. The Coordinating Center recommends time-delimited goals to motivate participating Centers to make steady progress on their goals. For example, the Coordinating Center gave the examples of the Translation Symposium in May and the 2018 legislative session, which provided important benchmarks for participants to work toward. Similarly, during the application phase, network participants should identify their audience as well as the implications of targeting that audience, and periodic checks during the project period could help ensure that all project activities remain aligned accordingly.

One Center expressed that expertise in one topic can be valuable, in that Centers will have time to **focus on translation rather than developing content knowledge**, resulting in more time for an ambitious project scope. Simultaneously, another Center believes that a thematic network project may be a good opportunity for ICRCs to **expand their portfolios in areas with which they are not currently engaged**.

The Coordinating Center recommends that future network participants understand that, particularly in the fast-moving field of injury and violence prevention, **flexibility is the key to success**. Translating evidence to practice is a process that involves many other stakeholders, many of whom will not have similar timelines, organizational structures, priorities, or resources. This is especially important when working with stakeholders in the policy/political sphere, where continual turnover, new appointments, and reluctance to change may seem like impenetrable barriers. **Remaining nimble** and identifying **responsive backup plans** could ensure continuity of the network's activities.

Regarding selecting **appropriate topics** around which to convene a thematic network, the Coordinating Center advises three criteria:

- 1. Is there a sufficient literature base for translation?
- 2. Do proposed interventions—not just descriptive epidemiology—exist?
- 3. Is there a clear projected impact of the proposed interventions?

The prescription opioid epidemic is an opportune topic area due to both increased public awareness and being a bipartisan issue among policymakers. The Coordinating Center also stresses the importance of continuing to include not only researchers, but public health practitioners when deciding which research question to pursue. Their on-the-ground knowledge of public health priorities and the communities in which they work is crucial to ensuring relevant, inclusive inquiry. In addition, consideration of cross-cutting topics—for example, research translation and systems thinking—is critical to the project meeting or exceeding its intended reach for not only policymakers, but practitioners as well.

While Centers overall agreed that the RFA was essential to moving quickly on project activities, one noted that a **longer application period** would have allowed Centers to identify the topic area collaboratively. In addition, some concerns were raised about the **disparity in the project's indirect rates** allowed by their Centers' home universities. It was suggested that the RFA specify an allowable indirect rate. Finally, several Centers noted that the **process evaluation took place too early**, as the project's final activities had not yet occurred. This was unavoidable as both the network deliverables and evaluation were on the same, six-month timeline.

FINDINGS AND RECOMMENDATIONS

The clearest challenge to participating ICRCs was the project's timeline. The overall timeline for the funding opportunity was one year, and by the time that the funding was awarded, the project team developed the RFA, and the application period closed, the network was left with six months in which to conduct project activities. Centers reported difficulties with convening a diverse group of stakeholders, especially those in the policy/political arena, in the six months allotted. In addition, the short timeline precluded flexibility in project activities and the ability to react and adapt to emerging opportunities, especially given the quickly-moving nature of the opioid epidemic response. Finally, hiring project staff can be a time-consuming process, due to universities' human resources processes. **Recommendation:** Extend the project's timeline to at least two years.

Another challenge involved the lack of face-to-face contact among network members. Communication among the network, until the Translation Symposium in May, took place over teleconference. Centers felt as if the Translation Symposium was a pivotal point in their communications and project activities, and unanimously reported that a face-to-face meeting would have been particularly helpful at the beginning of the project to build relationships, plan project activities, identify each Center's expertise and strengths, clarify expectations, and set deadlines. Recommendation: Build in time and funding to convene network members in-person at the project's outset.

Network members reported the effectiveness of letting themselves organize rather than having the funding agency choose which ICRCs would work together. The ICRC community is relatively small, and Centers are generally knowledgeable about one another's expertise and portfolios. Centers participate in many of the same national organizations and working groups, and thus have at least passing familiarity with each other's staff and knowledge base. Recommendation: Continue to allow network Centers to organize themselves and choose their partners.

Simultaneously, establishing more formal project benchmarks may benefit networks' progress. Concrete deadlines for deliverables, or even progress reports, will provide motivation to ensure that projects are on track and eliminate ambiguity in expectations. However, due to the inherent differences in the operations and priorities of each ICRC, as well as to promote a sense of project ownership among participants, funding agencies should allow as much flexibility as possible while still adhering to a general framework. Recommendation: Establish network benchmarks to ensure project progress.

Some administrative adjustments to the project's timeline and operations will benefit future networks. For example, a longer RFA period will allow all participating Centers, rather than the Coordinating Center, to collaboratively identify a topic area. In addition, a longer period for administrative tasks will ensure that the intricacies of contracting with universities are accounted for. Finally, the process evaluation should take place at the end of the network's activities to ensure that their views about the entire project are encapsulated. Recommendation: Adjust the administrative timeline to account for a longer application process, contracting activities, and evaluation at the conclusion of the project.

Some network members reported feeling as if collaboration was not appropriate early in the project's timeline, as individual Center activities were not yet substantially underway. This may indicate a disproportionate focus on achieving each Center's goals. The short timeline and the staggered progress across Centers hindered the ability of the network to emphasize the broader goals of the network. Recommendation: Align project activities to a framework stressing network goals and a collaborative process, allowing sufficient time to also complete individual Center products and accomplishments.

The benefits of working collaboratively for project oversight were evident in this project. Drawing on each partner's strengths to assist with major activities, from RFA development to process evaluation, resulted in a consistent project pace, understanding of the project's intricacies from several viewpoints, and perspectives that help to inform the process evaluation. For example, Safe States brings expertise in evaluation design and qualitative analysis as well as an infrastructure to support contract services, while SAVIR also brings expertise and experience in evaluation and qualitative analysis, as well as an in-depth knowledge of the mission, activities and functional capacities of ICRCs useful for the interpretation of project findings. Although there were coordination challenges, there were benefits to combining the expertise and staff contributions of the two organizations, Safe States Alliance and SAVIR.

Recommendation: Project design and oversight should continue to be a collaborative process of multiple, complementary perspectives represented in project leadership and organization.

CONCLUSIONS AND FUTURE IMPLICATIONS

The ICRC Thematic Network project holds promise for ICRCs to collaborate and disseminate evidence and recommendations for addressing thematic topics and the IVP field's most pressing challenges. In particular, the network's decision to target policymakers ensured that their efforts will reach an audience of great importance and with high potential for public health influence. As the Coordinating Center noted, it is impossible to overestimate the value of making decision-makers' jobs easier; a united front of several expert institutions can help to move the best evidence-based policy recommendations forward. Overall, the network's model was successful, with Centers reporting that their products and dissemination events will conclude according to the proposal timeline. With some adjustments to thematic project timelines, frameworks, and administrative procedures, future networks could result in a similarly impactful, cooperative process.

Future thematic networks could be a vision for effectively and collaboratively approaching single issue injury and poisoning issues intensively, but should be used to augment the ICRC mechanism, rather than to supplant it, as there are several ICRC functions that are vital to the field such as building research, training, and workforce capacity.

APPENDIX A: DATA SOURCES AND ANALYSIS

Four data sources were used to answer the evaluation questions.

Kick-off Discussion (December 2016)

Description: As part of the project kick-off meeting, representatives from the ICRC Coordinating Center participated in a discussion with SAVIR and Safe States Alliance staff to confirm their goals for the thematic network and discuss how their planned activities will support these goals. A semi-structured discussion protocol was developed and disseminated to participants prior to the kick-off meeting.

Analysis: SAVIR and Safe States Alliance staff took notes during the discussion. Safe States Alliance staff reviewed the meeting notes and extracted key themes related to the evaluation questions.

Monthly Check-In Calls (February – June 2017)

Description: The Coordinating Center participated in monthly meetings with SAVIR and Safe States to share network progress to-date, respond to a semi-structured interview protocol, and discuss overall function of the thematic network.

Analysis: During monthly calls, Safe States Alliance and SAVIR staff took notes throughout each discussion which were used to extract key themes and develop evaluation questions.

Mid-Point Survey (March 2017)

Description: At the mid-point of the project period, representatives from the ICRC Coordinating Center and each Collaborating Center were asked to complete a web-based feedback survey containing openended questions to evaluate their network participation experience to-date. Three out of four Centers completed one collective response to the survey, providing input on topics such as level of engagement, utility and productiveness of meetings, and overall progress toward goals.

Analysis: Key themes from the qualitative data were summarized to answer related evaluation questions.

Wrap-Up Discussions (May 2017)

Description: At the end of the project period, representatives from the ICRC Coordinating Center and each Collaborating Center participated in a conference call with Safe States Alliance staff to discuss their experiences as part of the thematic network (one meeting per ICRC). Three out of four Centers completed the interviews. A semi-structured discussion protocol was developed and disseminated to participants prior to the wrap-up discussion.

Analysis: The group discussions were recorded, and Safe States Alliance staff took notes during the discussion. Safe States Alliance staff reviewed the recordings and meeting notes and extracted key themes related to the evaluation questions.

APPENDIX B: EVALUATION QUESTIONS

Kickoff Call Discussion Questions

- 1. What are three goals you'd like to achieve as part of the thematic network project?
- 2. Thinking about the goals you've outlined, by the end of this project, what would "success" look like for you?
- 3. What was your process for developing and organizing your thematic network?
 - a. How did you choose your collaborating centers?
 - b. How did you decide on your network theme and topic area?
- 4. How do you plan to engage and collaborate with members of your network? What strategies or technologies do you plan to use to help everyone work together effectively?
- 5. As part of the thematic network project, one of your network's deliverables is to develop one or more products that can be used to advance the injury and violence prevention field within your thematic topic area.
 - a. In general, what do you think will help your network develop its products?
 - b. What methods or processes do you envision using to create products that are useful to both research and practice communities in the injury and violence prevention field? We understand that this may evolve once you begin working with your network partners.
- 6. What challenges do you think you and your network may encounter as you participate in this project?
 - a. What do you think you could do to address some of these challenges in advance?
 - b. What can this project team do to assist you in addressing these challenges?

Monthly Call Discussion Questions

- 1. What activities has the network undertaken this month?
 - a. Have there been any changes to your overall timeline? If so, what? Why?
- 2. Have you encountered any issues or challenges over the past month? What were they? How are you resolving them?
 - a. Are these challenges specific to your topic and the goals you selected, or are they generalizable when working across ICRCs?
 - b. What would you recommend to subsequent networks to avert these challenges?
- 3. Can you give us a sense of how you all are working together?
 - a. What were some of the first steps that you took?
- 4. Describe for us how your communication process works.
 - a. Who talks to whom? When?
 - b. How do you make decisions about next steps?
 - c. About logistics related to various activities?
- 5. What elements of the team are helping you achieve your goals?
 - a. How has communication been?
 - b. What is working best for encouraging communication between the team?
 - c. Are you collaboratively developing materials or working individually and coming together?
- 6. How have things changed since we last spoke?

Midpoint Survey Questions

- 1. Who at your Center was involved in completing this survey? Please list names and positions.
- 2. How often does your Center meet about this project internally?
- 3. How long are your Center's meetings about this project?
- 4. Who attends your Center's meetings, and what is their role on the project?
- 5. How many times has the network met as a group (all four Centers)?
- 6. How long are the network's meetings?
- 7. Through which mechanisms has the network held its meetings? Check all that apply.
 - a. In person
 - b. Teleconference
 - c. Skype or other videoconferencing software
 - d. Other (please specify)
- 8. Who from your Center has attended the network's meetings, and what is their role on the project?
- 9. Are minutes taken at your meetings?
- 10. Are action items delineated and agreed upon?
- 11. Other than network calls, how else is your network communicating?
- 12. Please briefly describe how responsibilities related to the project have been divided across the Centers within the network.
- 13. What activities are your Center conducting as part of this network? Please list your top three activities.
- 14. In what stage of completion are your activities?
 - a. Activity 1
 - i. Not started
 - ii. 25% complete
 - iii. 50% complete
 - iv. 75% complete
 - v. Complete
 - b. Activity 2
 - i. Not started
 - ii. 25% complete
 - iii. 50% complete
 - iv. 75% complete
 - v. Complete
 - c. Activity 3
 - i. Not started
 - ii. 25% complete
 - iii. 50% complete
 - iv. 75% complete
 - v. Complete
- 15. Thinking about Activity #1:
 - a. What challenges or obstacles have you encountered?

- b. How are you addressing these challenges or obstacles?
- c. What facilitators are helping you accomplish this activity?
- 16. Thinking about Activity #2:
 - a. What challenges or obstacles have you encountered?
 - b. How are you addressing these challenges or obstacles?
 - c. What facilitators are helping you accomplish this activity?
- 17. Thinking about Activity #3:
 - a. What challenges or obstacles have you encountered?
 - b. How are you addressing these challenges or obstacles?
 - c. What facilitators are helping you accomplish this activity?
- 18. Please briefly describe how responsibilities related to the project have been divided across individuals or teams within your Center.
- 19. How has the collaborative process of the network met your expectations going into the project?
- 20. How has the collaborative process of the network differed from your expectations?

Final Evaluation Interview Questions

- 1. How did ICRC networks organize themselves, set goals, and carry out their work?
 - a. How did all four Centers in your network collaboratively set goals, decide on activities, and delegate tasks across Centers?
 - b. How did your specific Center and partners set goals, decide on activities, and delegate tasks internally?
 - c. What advice would you give to future networks regarding how to organize their collaborative activities and workflow?
- 2. What processes, logistical supports and activities, and structures:
 - a. Helped network members work effectively toward their consensus goals?
 - b. Facilitated active collaboration among thematic network members?
 - i. Thinking logistically, what activities or processes have helped you and your network members to actively communicate and collaborate during the project? How do you think these activities and processes helped you and your network members to work collaboratively toward your goals?
 - ii. What other elements could have enhanced your collaboration and communication throughout the experience (across Centers and within your Center)?
 - c. Supported the development of network products?
 - i. What specific processes and activities have helped your thematic network to develop its products?
 - ii. What recommendations do you have for future networks relative to identifying and developing network products?
- 3. What challenges did network members encounter while participating in the thematic network? How were these challenges addressed and/or overcome?
 - a. Previous discussions have indicated that the project's short timeline has been a challenge. What other challenges did you encounter, and how did you address them?
- 4. What recommendations do you have for future networks?

- a. What has been the *most* valuable aspect of your Center's participation in the ICRC Thematic Network project?
- b. What has been the *least* valuable aspect of your Center's participation in the ICRC Thematic Network project?
- c. How important do you feel a face-to-face kick-off meeting with all four Network centers would have been in organizing and setting goals, both internally and for the Network?
- d. What other injury and violence prevention topics do you believe could benefit from an ICRC thematic network?
- e. In general, how do you think other types of ICRC thematic networks could help to advance injury and violence prevention research and practice?
- f. What recommendations would you share with other ICRCs that may be interested in forming and participating in a cross-center thematic network?
- g. Based on the RFA to which you responded, what changes would you recommend to the application process?