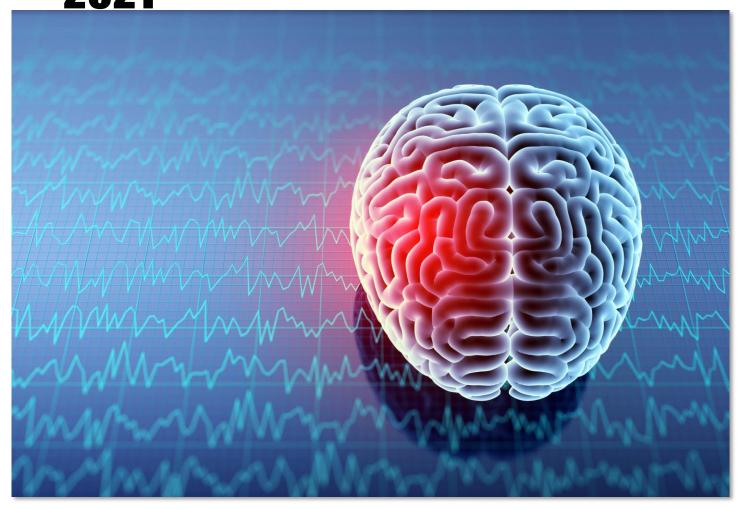
2021 TBI NPLT 2016 – 2021 Project Final Report



Traumatic Brain Injury National Peer Learning Team: Project Overview and Lessons Learned



July 2021

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For more information or additional copies of this report:

Washington State Department of Health Prevention and Community Health Office of Health and Safe Communities Injury and Violence Prevention PO Box 47855 Olympia, WA 98504-7855 360.236.2863 wpipn@doh.wa.gov

Report Authors

J. William Hitchcock, PhD – Washington State Department of Health Kelsie Cleboski, MFA – Harborview Injury Prevention & Research Center Devin Moore – Harborview Injury Prevention & Research Center

Umair Shah, MD, MPH Secretary of Health

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Executive Summary

The Traumatic Brain Injury National Peer Learning Team (TBI NPLT) is a learning community focused on TBI prevention. The TBI NPLT is a project of the Regional Network Coordinating Office (RNCO) at Washington State Department of Health (DOH). The purpose of the group is:

- 1) Learning in a Collaborative Environment: We will identify the key TBI topics and hear presentations on those topics, share best practices peer-to-peer, and engage in rich conversations that are essential elements to learning.
- 2) **Engagement and Implementation**: We will support working groups as they develop projects and products showing what we have learned.
- 3) **Communication**: Our aim is to communicate both within the NPLT to share our learning and then outside the group to disseminate our products to reach the general population and enhance the field of TBI Prevention.

The mission of the TBI NPLT: Brain injury changes lives and alters our life paths. Everyone knows stories of a coworker, friend, or family member who wasn't quite the same after a cycling or motor vehicle crash or a young person that took a hard hit or fall playing sports then started struggling with schoolwork. We often don't connect the long-term quality of life symptoms with the physical injury, but we are learning that brain injuries occur more often than we thought. In fact, more people experience a brain injury each year than all leading sites of cancers diagnosed. That is why we are bring together brain injury leaders to develop and act on a plan to prevent these injuries across the lifespan nationwide.

The TBI NPLT utilized a Systems Thinking approach to planning, development, and implementation. Core teams from diverse public health, research institutions, service organizations, national technical assistance agencies, and CDC collaborated to identify activities and topics that were covered.

The NPLT sponsored 7 webinar sessions, 3 virtual conferences, and promoted 5 webinars and conferences of national partners. Regular communications were sent through a GovDelivery listserv, and general information was posted on the TBI NPLT website hosted on the Washington State Department of Health, IVP webpage. Members had opportunity to connect further through an online message board, and through an Ask the Expert Event on TBI and Domestic Violence.

Years four and five were heavily impacted by COVID with delays, reschedules or cancellations of speakers, webinars, contracts and report completions.

Key lessons learned included having a strong communications plan and platform established at the beginning of the project, adequate training and guidance from funding on framework and specific goals, provide incentives and resources to participants for professional development to enhance engagement, and build collaborations and partnerships for sustainability.

Phase I: Planning and Organizing

The TBI national peer learning team started in 2016 with the CORE SVIPP grant funding. Planning started with an in-person training organized by CDC with Pontifex Consulting on the Systems Thinking approach. From this multi-day training the core advisory team worked through the initial development of a vision and mission statement, identification of key stakeholders, goal setting as well as start building stock and flow maps for TBI prevention. Following this training DOH established a contract with Harborview Injury Prevention and Research Center (HIPRC) to provide subject matter expertise and organize and host a pilot for a virtual research symposium towards the close of year one in June of 2016.

Initial membership list was developed through sign ups during the Core SVIPP grantees meeting and word of mouth through the WPIPN network Listserv and cross promotion with other RNCO's. The core advisory team conducted needs assessments and SWOT analysis (Appendix A) at the beginning of the project. Some of the findings from these early included:

The majority of patients presenting with a mild TBI are seen by their primary care physician (PCP) and not by a trauma center, EMS, or emergency room. PCP's are not well equipped or knowledgeable on how to address this injury and educate patients on reducing secondary concussion. We need a system that would prompt assessing for possible secondary concussion risk and a platform to educate patients.

In a random sample of surveyed individuals nearly half reported receiving a blow to the head and didn't seek medical attention. The field needs a way to more effectively engage these individuals into the system.

Traumatic brain injury is a hidden injury. After the initial physical scars, bruising, and swelling are gone the patient may have a normal appearance but may still be experiencing significant cognitive and socio-emotional deficits impacting their overall daily functioning and impacting their relationships and resources from other family and friends to provide their support and care having an exponential financial and societal impact. TBI also can present with latent and progressive disabilities where symptomology may come on and increase over time. This impacts public perception of risk and poses a challenge for community by-in for behavioral changes that public health will need to address.

Much of the policy work on TBI has focused on return to play and has focused on public schools, but this fails to address the more critical learning environment and even within sports does not address private or local league play often focusing on public school sports programs only or has limited enforcement. There is a continued gap in adequately addressing the impact of soldiers coming home from war with TBI and how those injuries could be addressed both in prevention and support services upon return.

The Federal government is assessing combining the TBI council networks, Independent Living council networks, and Developmental Disability Council networks to reduce overall funding. This would be detrimental to the field as each of these distinct groups that provides specific services

would lose their individual identity and reduction in funding would negatively impact services to the community. This change is being assessed for the 2018 budget. Policy guidelines would assist community associations and programs to educate policy makers on the issue and help TBI professionals to understand the policy process and how to best communicate with policy makers within appropriate restrictions.

Key Stakeholders

The key stakeholders of the TBI NPLT include a core advisory team, an extended subject matter expert field, and the audience. The goal is to utilize a Systems Thinking Framework to incorporate a diverse partnership that takes TBI from a different perspective and bring these individuals together to connect their respective practices and skills to have a greater impact on prevention of TBI.

The core team is a small focused group of individuals working to identify current gaps in TBI work and knowledge base and then set a strategic plan to connect subject matter experts with public health professionals and to provide a platform for public health professionals to collaborate for the development of policy and programming to reduce TBI.

The extended team is a group of subject matter experts that will be able to inform the field on current knowledge related to TBI and public health education and communication. This group of researchers and public health professionals were accessed as presenters or to get additional information as needed to develop strategic planning or to adjust planned topics as needed to meet current needs of the larger TBI prevention field.

The audience includes public health professionals charged with developing policy and programs for sustainable interventions, evaluating implementations, and reporting on outcomes. A second distinct audience, healthcare professionals was identified by the core team early on and became the focus for learning opportunities. The core planning team felt strongly that healthcare professionals and then public health professionals should be prioritized for learning about TBI as both these groups have direct access to the general population and act as the gateway for information related to prevention, early intervention, and long-term recovery. Educating these two groups would provide leverage and allow for wider expansion of trusted information to the general public.

Core Team

RNCO	Facilitate NPLT
BIAW	Knowledge of large-scale collaborative groups; SME

Harborview/UW	Contracted for SME & dissemination of current research/practice
NWCPHP	Training capacity/speaker development/preparation
Marketing/communications (DOH?)	Effectively get messaging out
ICRC's/Research	SME's – Current Research - Cross Topic Connections
DSHS/TBI Council - Scott Bloom	SME

Extended Team

Medicaid	Burden; Policy Driver
DBHR/VocRehab	SME; Burden; Policy Driver
OSHA	Policy Driver
Insurance	Burden; Policy Driver
National associations/research groups American Congress of Rehabilitative Medicine - Interest Group	SME – What is working and not working – Info on state programs, Public Policy
National Association of State Head Injury Administrators (NASHIA)	
North American Brain Injury Society (NABIS)	
Tribal	High impacted population
CDC	Unintentional Injury SME/TBI SME/Systems Theory SME/Grantor – set parameters
Military	SME

Learning Plan

The TBI NPLT utilized available web-based technology to share information, engage in discussion, and apply new transformative knowledge into community practice. The overarching framework was an adaptive peer learning model based on collaborative sharing and discussion. Information was shared primarily through virtual webinar presentations and email distribution lists with some presentations at conferences such as Safe States Annual Meeting. The following tables outline the communication and education strategies. We had discussed the possibility of

setting up podcast and an interactive web page, but both were cost prohibitive within the funding available under the RNCO supplemental grant. Access restrictions for external partners on the DOH SharePoint side prevented the use of SharePoint. Members thought the extra steps and login required to access the site were too cumbersome and requested external easily accessed and navigated platform for asynchronous communication and archiving.

Vehicle	Stakeholders / Individuals	Start Date / Frequency	Owner
Distribution Lists - GovDelivery	TBI NPLT subscribers	6/1/2017 – Quarterly to Monthly starting 9/13/17	RNCO - WADOH
Research Symposiums – Through Zoom platform	Public Health Professionals, Researchers, Support & Rehabilitative Services Physicians	5/1/17 – Annually with potential for bi-annual or series. 4-6 hours per series up to 2 series focus areas	HIPRC
Conference Call Lines	TBI NPLT subscribers	10/1/2017 – Quarterly or as needed for sub committees or project teams	May Vary
Webinar Platforms – GoTo	TBI NPLT subscribers	10/1/2017 – Quarterly to monthly Webinar platform may be combined with conference calls for both NPLT and sub- committee meetings so frequency will vary	RNCO
Pod Cast	Public Health/Providers	TBD – Currently researching	unknown
Web Page	Public (limited) TBI NPLT (secure)	1/1/2018 or sooner. Frequency of updates will follow created communications plan	RNCO
SharePoint	TBI NPLT subscribers	TBD – Currently researching	unknown

The NPLT will increase Conversational Capacity through the Core and Extended Team by:

Action Item	Details
Facilitated discussion sessions	State prevention leaders by conference line after symposium session to discuss new knowledge and how to implement
Virtual meeting rooms	Specific subgroups/work groups could set up and hold virtual meetings to discuss specific shared work
Collaborative Communications Platform	The discussion board section will allow team members to communicate asynchronously on various discussion threads and messages can be sent to the whole group or to specific individuals. Messages are open to all those involved and allows participants to communicate without interruption and others to consider and respond in turn.

The NPLT will build/include the following in order to create an ability to spontaneously interact (hang out*)

Vehicle	Stakeholders / Individuals	Start Date / Frequency	Owner
Collaborative Communications Platform	TBI NPLT subscribers	Sept 13, 2017 – just in time/asynchronous	RNCO - WADOH

Collaboration

The TBI National Peer Learning Team seeks to connect public health professionals, researchers, and other treatment professionals addressing traumatic brain injury across the US and its territories. These geographic and time spans combined with differing levels of access and bandwidth for members and potential audience pools required a multilevel communication strategy utilizing telecommunications and web-based platforms. Access had to be a high consideration. Access considerations were not only reaching partners in low bandwidth areas such as rural hospitals or the Pacific Islands but also security access, especially for those in Government agencies where restricted use for different emerging platforms at the beginning of the project existed. The systems used had to be approved by DOH but also had to be a platform

with easy access for external partners meeting their unique security restrictions. Educational learning opportunities were provided through public health, researcher and physician led virtual symposiums or webinars. Collaborative webinar and conference calls were used to facilitate discussions or share best practices in real time. A collaborative project management platform where team members could engage in discussions asynchronously to share regional cultures and challenges and engage support, feedback, or additional resources was planned in years four and five. The collaborative project management platform was impacted by COVID and the shift of funding for regional networks from states to Safe States Alliance and never came to fruition.

Skills Needed for Effective Meetings and Activities

Skills the core strategic planning committee have identified as important for overall success of the TBI NPLT include:

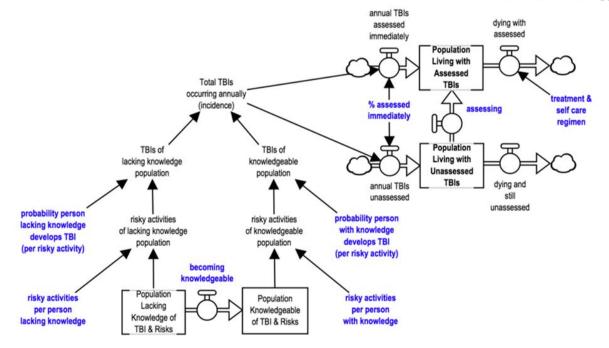
- Conversational Capacity
- Facilitation questions to guide discussion sessions or take a deeper dive during symposiums and to guide strategic planning phases
- Updated Timeline
- Systems Thinking knowledge and resources
- Training on Adaptive Learning/Conversational Capacity/Meeting or training facilitation
- Having a trained facilitator for discussion and planning meetings
- Research to Practice translation

Strategy and Gap Analysis

The core strategic planning team worked with Pontifex Consulting to develop a stock and flow map (figure 1) to guide planning and implementation. Despite having additional one-on-one technical assistance from Pontifex Consulting, core planning team members struggled with understanding how to use the stock and flow maps. Information and progress from the systems map was incorporated into a problem map that was in a more familiar problem map and gap analysis (figure 2) format that followed more of a traditional logic model flow. Team members felt this was easier to follow and identify where problems existed, they felt should be addressed. From a facilitator perspective the systems map model was easier to get engagement of the team members to participate but at the cost of identifying more upstream factors that were influencing the pressure points. We were able to get to those through discussion, but it was not well captured visually. This would have improved ability for continuous improvement strategies to guide future work if the project had continued.

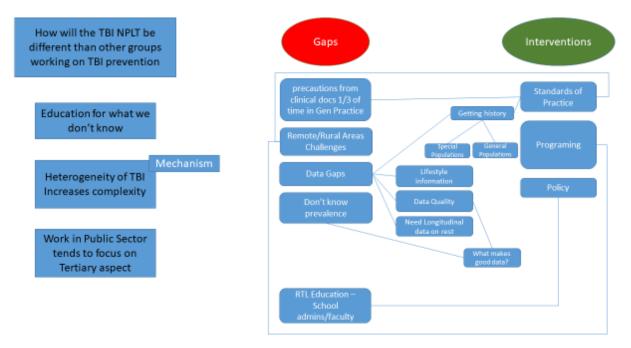


TBI NPLT Strategy



TBI Systems Map - Awareness

Figure 2.



TBI Problem Map – Gap Analysis

Phase 2: Implementation and Engagement

General Communications

Implementation started in year one with virtual web meetings via GoToMeeting platform. GoTo was identified by the membership to be the most used and most accessible platform for members at that time. The GoTo platform allowed for a virtual face-to-face interaction for members with ability to post links to resources and contacts in the chat as well as have verbal communication and share screens for presentation of material. These started with our Core Advisory Team responsible for developing the initial strategic planning, building membership and organizing pilot virtual research symposiums. This group met approximately every other month from December 2016 to May of 2018 when it transitioned to a Core Planning Team. The Core Planning Team was responsible for organizing and hosting the year 3 conference series.

In addition to GoTo web platform, the NPLT was presented with a group messaging platform, Yammer, to use as a pilot to test asynchronous messaging between members. Yammer was not well accepted. It was cumbersome to sign up and did not provide notifications to members when new messages were posted. Members reported it was just one more thing they had to sign in for and thought they may have used it more if there was a way to automatically be signed in or if it was part of a larger tool as part of their day-to-day work. The Yammer platform was abandoned in July 2019 after the Ask the Expert session on intimate partner violence and traumatic brain injury.

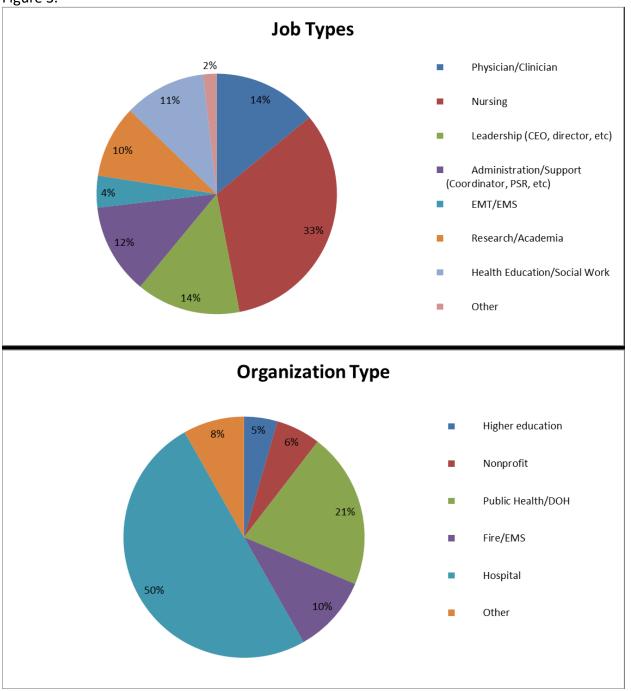
General member meetings were held quarterly starting in October 2017 to discuss previous presentations, needs in the field of TBI prevention, and to share TBI prevention tools and resources. The GoToMeeting platform was the mode of communication for these meetings. Meetings were recorded but could not be saved to DOH servers due to bandwidth. There was an option to closed caption all meetings and post to the DOH YouTube channel, however, it was cost prohibitive with the given funding levels for RNCO. Virtual symposiums and webinars organized through HIPRC were recorded, closed captioned and uploaded to HIPRC's media channels.

Virtual Symposiums and Webinar Series

Year 1 Pilot Virtual Symposium – Pediatric TBI: June 9, 2017

The TBI NPLT virtual research symposiums and webinar series started at the end of year one in June 2017 with a virtual research summit on pediatric TBI. HIPRC hosted and managed this event. This all-day virtual event included 8 speakers on pediatric TBI Issues from prevention and public health to rehabilitation.

Based on the strategic plan the focused audience was healthcare professionals. As seen in figure 3, nurses comprised one third of the total viewership, followed by physicians (14%), administrators (12%), health educators (11%), academics/researchers (10%) and EMT's (4%). Viewers hailed from both urban and rural hospitals, as well as public schools, government institutions, and non-profits. Fourteen percent of viewers held leadership positions, some of whom reported using the webinar as a training opportunity to share with a larger group.





We had 170 unique logins from 21 states and 3 foreign nations. International participants were from the UK, Bulgaria, and Saudi Arabia. The maps in figure 4 show the spread of participation and post survey completion. The red map shows the total number of registrants from each US state, and the blue map shows people who completed our post symposium survey. Since many registrants did not identify a location, it's likely there were participants from more than the 21 states indicated. Additionally, as some reported watching in groups, there were likely unregistered viewers in each state.

Survey responses for this first virtual symposium were positive. Of the 45 respondents to the CNE survey, 82% rated the webinar as "very good" or "excellent" (figure 5) indicating a good fit for our target audience that included nursing staff and students. Survey respondents reported an increased confidence in topics covered across the board with an average of 60% stating they are much more confident in identifying and explaining the medical issues covered in these topics (figure 6). Less than 10% on average indicated that they were no more comfortable with their grasp of any given topic.

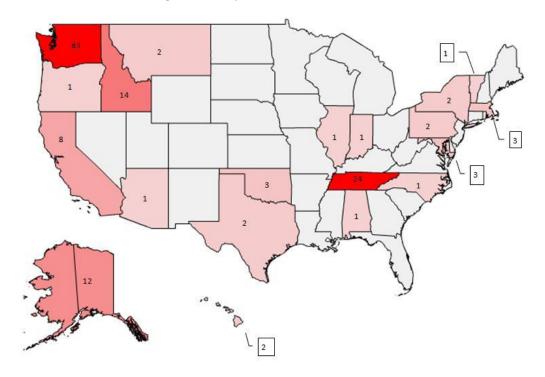
A few viewers commented that they would have preferred more advanced content; however, the vast majority reported they were pleased with the academic level of the presentation and enjoyed the level of engagement provided by the speakers. We received several comments praising each presenter's skills in effectively communicating the subject matter and expressing gratitude for the opportunity to hear from nationally recognized experts. We also received several requests for certificates of participation in the webinar indicating that participants saw this as a valuable resource for learning.

Presenters and topics for the session included:

- Dr. Frederick Rivara, MD, MPH Traumatic Brain Injury Prevention and Public Health
- Dr. Monica Vavilala, MD Brain Trauma Foundation Guidelines for Acute Care
- Dr. Beth Ebel, MD, MSc, MPH Car Seats and Seatbelts
- Dr. Carole Jenny, MD, MBA Child Abuse
- Dr. Molly Fuentes, MD, MHS Rehabilitation Needs, Practice and Outcomes
- Dr. Sara Chrisman, MD, MPH Return to Learn Challenges and Solutions
- Dr. Stan Herring, MD Recommendations for Return to Play
- Dr. Jamie Shandro, MD, MPH Emergency Stabilization for Pediatric TBI

Figure 4.

Registrants Reported from Each State



CNE Survey Respondents from Each State

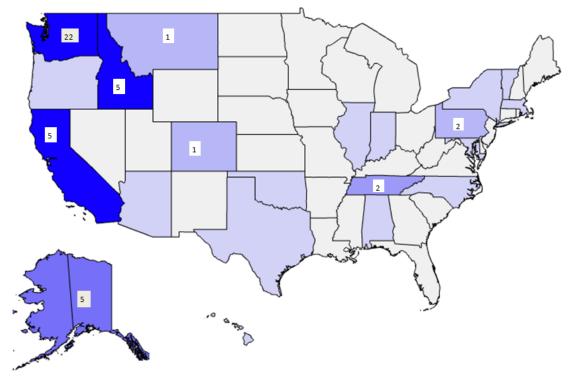
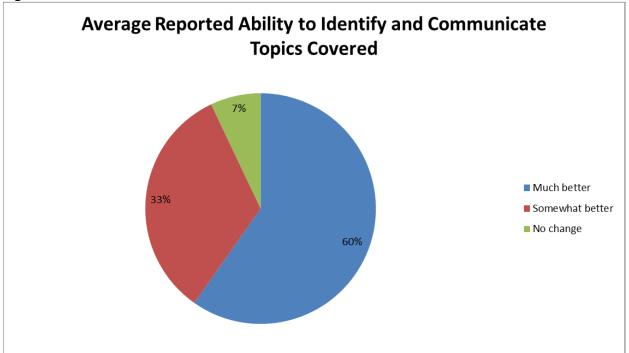


Figure 5.

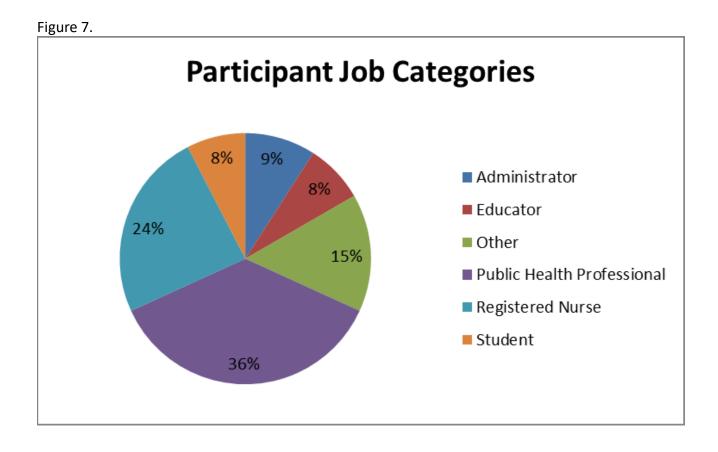


Figure 6.



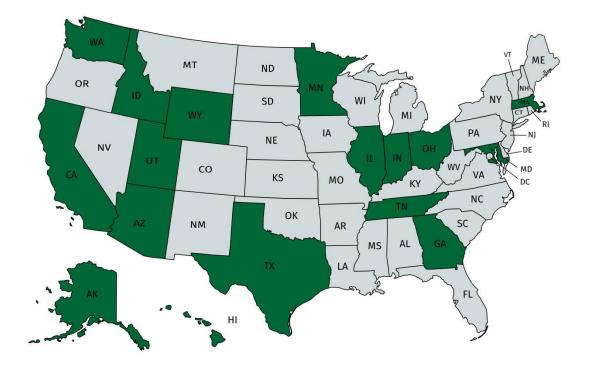
Year 2 Virtual Symposium – TBI in Adults and Life Course of TBI: April 25, 2018

With the success of our pilot we rolled out the next research symposium in year 2. The NPLT's Core Advisory Group had identified through early needs assessment a need to provide leverage for TBI outside of youth sports and planned for a symposium focused on adult injuries and a lifespan perspective. This lifespan perspective looked at TBI injuries from prevention to pre-hospitalization and EMS care, to in hospital care, rehabilitation, and long-term sequelae as well as talk about older adults and intimate partner violence. In year 2 we incorporated more interaction by providing distinct time after each presentation for discussion for a question and answer session. We also added in public health as a target audience along with medical professionals. Together, nurses and public health professional totaled 60% of our audience. The remaining audience included Administrators (9%), Educators (8%), Students (8%), and Other (15%). Responses from those who preferred not to choose a category included roles such as Brain Injury Liaison, Recreation Therapist, Researcher, and Speech Language Pathologist.



We successfully reached a nationwide audience for this webinar. The map in figure 8 displays the location of reported participants. Registration did not require registrants to list their states and many registrants did not identify a location, it's likely there were participants from more

Figure 8

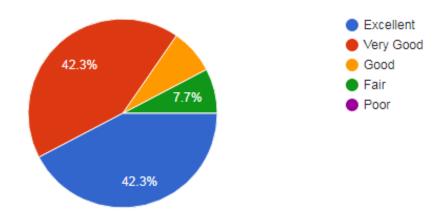


than the 17 states indicated. Of our 76 registrants, we had 63 unique logins during the course of the day. There was a notable difference in the number of participants for this symposium on adult issues in TBI as compared to our first symposium on pediatric TBI. We felt that this was a function of less focus or more diverse specialization across injury communities for adults indicating a need for this series to bring awareness and voice to TBI topics that may not get as much public or media attention but hold a higher percentage of TBI injuries such as that with older adults and falls.

While some participants were only able to attend only a portion of the symposium, the majority were logged in for the entire duration. We know that some participants opted to watch in groups, meaning we most likely had nearly all registrants attend for at least part of the day. We also likely had additional unregistered viewers from the Department of Health taking part in viewing groups. Those who missed lectures appear to have watched later using the YouTube link to recorded sessions. The playlist showed 50 additional views after the live event.

Feedback from viewers was overwhelmingly positive as seen in figure 9. We received a total of 26 evaluations and 85% of the viewers rated the webinar "Excellent" or "Very Good", and none rated the webinar as "Poor."

Figure 9.



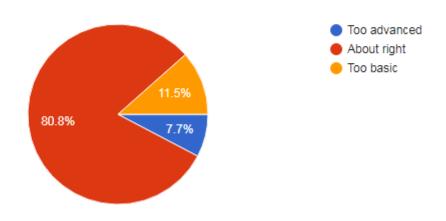
What is your overall assessment of the course?

The vast majority of viewers reported they were pleased with the academic level of the presentation (figure 10) and enjoyed the level of engagement provided by the speakers, although a small number of viewers commented that they would have preferred more advanced content or that it was too advanced for their learning needs. One challenge with this symposium was to ensure we had content relevant to both medical staff with a high level of technical terms and procedures while at the same time have translation to include public health and community based engagement and simplicity for broader dissemination to the general public by public health professionals. Each speaker was asked to consider both medical and public health could collaborate better or benefit each other from a mutual partnership.

Participants rated the webinar as very informative and feel better equipped to deal with the topic areas covered. As in the pediatric symposium in year 1 we again received comments commending the presenter's skills in effectively communicating the subject matter and gratitude for the opportunity to hear from nationally recognized experts. Several viewers indicated they planned to change their medical practices based on the information provided. Others said that they intend to use some of the models and examples provided in the presentations as educational resources for training future medical professionals.

Figure 10.

Overall, for your learning needs, how appropriate was the level of content?



Adult TBI Webinar Marketing Summary

In addition to internal Department of Health communication, we sought to market the webinar to professionals in related fields – primarily public health professionals, nurses, physicians, EMTS and others working with traumatic brain injury.

We assigned each venue a unique URL to track traffic and identify our primary channels. Results can be seen in figure 11.

Traffic Channels to Eventbrite Page - Total Page Views: 1,123

Email Lists - Email Lists included contacts from a broad range of potential attendees. Each contact was emailed a minimum of 4 times: approximately 3 months in advance, 6 weeks in advance, 3 weeks in advance and 2 weeks in advance.

Contacts by Type:

- Pediatric TBI Webinar Registrants: 320
- Community and National Stakeholders: 132
- CDC-funded Injury Control Centers: 9
- Trauma Centers: 24
- Rural Agencies: 19

- UW School of Medicine Chairs: 30
- Social Media 21 Posts, Approximately 10,000 impressions across Facebook and Twitter

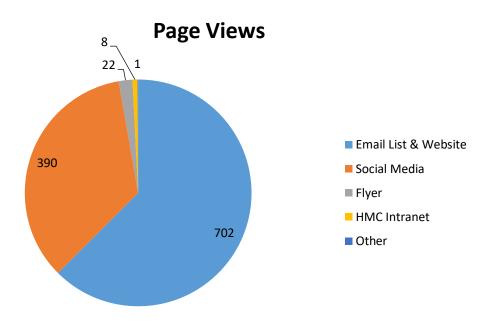


Figure 11.

Presenters and topics for the session included:

- Hilaire Thompson, Ph.D., RN Special Considerations for the Elderly
- Peg Ogea-Ginsburg, M.A. and Peggy Reisher, MSW Nebraska Department of Health and Human Services and Brian Injury Alliance Nebraska Partnership to address TBI in Domestic Violence
- Saman Arbabi, M.D., MPH Pre-hospital Care
- Randall Chesnut, M.D. In-hospital Care
- Jennifer Zumsteg, M.D. *Rehabilitation and Outcomes after TBI*
- Jesse Fan, M.D., MPH Psychological Sequelae

Year 3 Webinar Series - Innovative Practices and Partnerships to Prevent Traumatic Brain Injury 2018 - 2019

In collaboration with the Washington State Department of Health and the TBI National Peer Learning Team, Harborview Injury Prevention & Research Center developed a continuing education project on traumatic brain injury topics for medical and public health professionals. In developing the series, HIPRC drew on the expertise of leading TBI researchers and health professionals from a broad range of fields, as well as our past experience hosting day-long online seminars on TBI, also created in collaboration with the WA DOH.

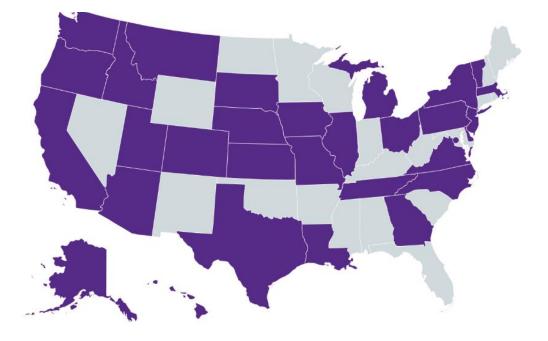
The year 3 (2018-2019) project included two components: a four-part webinar series and an online discussion tool. For this project year we took feedback and other learnings from the previous sessions and increased opportunities for engagement and sharing of TBI prevention and identification tools further. We offered a series of 90-minute webinars on specialized topics. This choice offered more flexibility to attendees, ample time for Q&A sessions, and the ability to market the webinars to specific audiences with a particular interest in the topic.

Each webinar was organized into two speaker pairs: a TBI researcher and a public health professional working in a related field. Each gave an individual talk, then each webinar concluded with a joint Q&A session with attendees. Our goal for this format was to explore the chosen topics from the perspectives of both current research and practical application and challenges.

The theme of the webinar series was, Innovative Practices and Partnerships to Prevent Traumatic Brain Injury. The series kicked off at the 2018 Safe States Alliance Annual Meeting with a live in-person session then was followed by three virtual webinar sessions held quarterly over the next year. The topic areas covered in the series included: fall prevention among older adults, pediatric concussion, return to learn, community engagement, social norms in TBI reporting, continuum of care, and health disparities in TBI. Each session included one or more research tools or best practice that participants could use or adapt to use with their populations or connect with researchers about additional implementation. The three virtual webinars are publicly available with closed captioning on both HIPRC's YouTube channel and online webinar archive: http://www.hiprc.org/education/webinar-video-archive.

We did not collect demographic or attendance information from the session at the Safe States Annual Meeting. Across the remaining three webinars, we received 691 registrations from 30 states representing all 10 HHS regions in the U.S. (Figure 12). Registrations from outside the U.S. included participants from Canada, Panama, Costa Rica, Lebanon, South Africa, and Ireland. The discussion board received more than 100 registrations.

Figure 12.



States represented in TBI webinar series registrations

Session 1 – In-person at Safe States Annual Meeting: Innovative Practices and Partnerships to Prevent Traumatic Brain Injury

Speakers for session 1 included:

- Steve Marshall, PhD, Moderator
- Rachel Heitmann, MS, Tennessee Department of Health *TBI Prevention Strategies: Return to Learn/Return to Play; Safe Stars Program; Abusive Head Trauma prevention*
- Paula Gildner, MPH, University of North Carolina *The BANK study: Concussion* Disclosure Behaviors, Attitudes, Norms, and Knowledge in Civilian and Military Emerging Adults.
- Peg Ogea-Ginsburg, MA, Nebraska Department of Health and Human Services *Brain Injury and Domestic Violence.*
- Brianna Mills, PhD, Harborview Injury Prevention and Research Center *Continuum of Injury Care*

Session 2 - Webinar: Fall Prevention Among Older Adults

Date: 12/06/2018

The fall prevention webinar covered the current research and understanding of the relationship between falls and TBI among older adults, including prevention strategies, then took a deep dive into an evidence-based exercise program for older adults. The exercise program included both exercises and individual evaluation based on balance, fitness, and other factors that research has shown to reduce fall risk.

Presentations:

- Hilaire Thompson, Ph.D., RN, ARNP, CNRN, AGACNP-BC, FAAN, Joanne Montgomery Endowed Professorship in Nursing, University of Washington *TBI and Fall Prevention among Older Adults*
- Paige Denison, Director, Project Enhance, & Director, Health and Wellness Department, Sound Generations, Seattle, WA - *Decreasing Fall Risk Factors with Evidence-Based Group Exercise*

Participation:

- Registrations: 224
- Login Sites: 131
- Recording Views: 75
- Discussion Board Question Responses: 6
- Evaluation Responses: 12

Evaluation Results

Overall, attendees were pleased with the content and quality of the webinar. In feedback, some attendees were interested in information focused more specifically on fall prevention in long-term care facilities and institutional settings.

Relevance to Practice:

- Very Relevant: 50% (6)
- Somewhat Relevant: 50% (6)
- Not Relevant: 0

Level of Content:

- Too Advanced: 0%
- About Right: 91.7% (11)
- Too Basic: 8.3% (1)

Quality of Course:

- Excellent: 33.3% (4)
- Very Good: 41.7% (5)
- Good: 25% (3)
- Fair: 0
- Poor: 0

Session 3 - Webinar: Pediatric Concussion and Return to Learn

Date: 03/13/2019

The pediatric concussion webinar covered the current context of return to learn policies and programs in the United States, then detailed the development of the RTL toolkit in Washington state. The presentation also focused on how school nurses and professionals played an integral role in developing and refining the toolkit, as well as challenges and next steps to implementing return to learn programs more widely.

Presentations:

Monica Vavilala, M.D. Professor of Pediatrics, University of Washington Director, Harborview Injury Prevention & Research Center; Seattle, WA - A Student-Centered Plan for High School Return to Learn After Concussion

Laura Widdice, BSN, RN, NCSN Director – Health Services, Renton School District; Renton, WA - Student Concussions and School Nurse Support: Identifying Needs and Building Solutions

Participation:

- Registrations: 353
- Login Sites: 160
- Recording Views: 109
- Discussion Board Question Responses: 3
- Evaluation Responses: 56

Evaluation Results

Most attendees were satisfied with the content and quality of the webinar, with a few noting they felt the content was too basic and didn't teach them new information. In comments, some attendees who gave the webinar lower ratings noted they would have preferred the inclusion of the full toolkit for participants to follow along with during the presentation. Attendees also gave positive feedback that they gained a greater understanding of the national context of return to learn programs and better understood the strengths and weaknesses of their local return to learn approaches.

Relevance to Practice:

- Very Relevant: 80.4% (45)
- Somewhat Relevant: 17.9% (10)
- Not Relevant: 1.8% (1)

Level of Content:

- Too Advanced: 0
- About Right: 87.5% (49)
- Too Basic: 12.5% (7)

Quality of Course:

- Excellent: 23.2% (13)
- Very Good: 44.6% (25)
- Good: 19.6% (11)
- Fair: 7.1% (4)
- Poor: 5.4% (3)

Session 4 - Webinar: Health Disparities and Traumatic Brain Injury

Date: 05/15/2019

In the health disparities webinar, attendees learned about the overall context of health disparities, as well as current research around disparities in TBI specifically, such as disparities related to language, access to health services, socioeconomic status, and others. The second half of the webinar featured a case manager on a project working directly with TBI patients to actively address barriers, concerns, and practical solutions related to disparities.

Presentations:

Megan Moore, Ph.D., MSW, Sidney Miller Endowed Associate Professor in Direct Practice, School of Social Work, University of Washington - *Traumatic Brain Injury and the Health Disparity Landscape*

Maria Cole, LMSW, MPH, Case Manager-Research, Baylor Scott & White Institute for Rehabilitation, Dallas, TX - *Navigating Health Disparities in the BRITE Project*

Participation:

- Registrations: 114
- Login Sites: 62
- Recording Views: 11
- Discussion Board Question Responses: 3
- Evaluation Responses: 9

Evaluation Results

Overall, attendees were pleased with the content and quality of the webinar. On evaluations, several participants said they had gained a new awareness of ways that disparities can impact individuals with TBI and planned to share what they had learned with others. One noted a technical issue with difficulty hearing one of the speakers.

Relevance to Practice:

- Very Relevant: 33.3% (3)
- Somewhat Relevant: 55.6% (5)
- Not Relevant: 11.1% (1)

Level of Content:

- Too Advanced: 0
- About Right: 100% (9)
- Too Basic: 0

Quality of Course:

- Excellent: 11.1% (1)
- Very Good: 44.4% (4)
- Good: 33.3% (3)
- Fair: 11.1% (1)
- Poor: 0

In summary, the webinar series received strong interest, participation, and evaluations overall. The two-part format worked well conceptually and allowed for ample time for further questions for the presenters. Additional topic ideas raised by participants include fall prevention in assisted living facilities and other institutional settings, support and research around prolonged TBI rehabilitation, and topics around return to play after concussion.

TBI Topics Discussion Board

With the goal of facilitating networking and continued engagement and resource sharing among attendees, we also developed an online discussion board tool: TBI Topics for Health Professionals (tbi-topics.boards.net). This discussion board featured post-webinar discussion questions, access to presentation slides and recordings, and an "Ask the Expert" live Q&A event as draws to encourage users to register for the board. From there, the goal was for users to continue using the discussion board to share resources and insights.

A free, third-party discussion tool (ProBoards) was selected to host the discussion board. Given that much of the target audience works at government agencies, hospitals, and universities and schools, there were concerns that established social tools such as Facebook, LinkedIn, or Google products would be blocked or discouraged in their workplaces.

Discussion Board activity - Ask the Experts: TBI & Domestic Violence

Date: 01/30/2019

Our Ask the Expert event featured two public health professionals and their work developing and testing a TBI screening tool for domestic violence shelters in Nebraska. Discussion included questions about other applications for the tool, buy-in from shelter staff, and other topics.

Presenters:

- Peggy Reisher, MSW, Executive Director of the Brain Injury Alliance of Nebraska.
- Peg Ogea-Ginsburg, M.A., Program Manager for the Injury Prevention Program at the Nebraska Department of Health and Human Services.

Participation & Evaluation:

- 10 Questions Posted by 5 users, 3 from HIPRC, 1 from DOH
- Estimated 31-36 attendees, 6 participants
- User Evaluations: None submitted
- Presenter Evaluations: Overall the presenters were happy with the format, suggested giving presenters a phone orientation to the discussion board & a clearer sense of how long they had to write responses.

Overall Discussion Board

Participation:

- Registrations: 114
- Posts: 73 (45 by HIPRC staff)
- Webinar Discussion Questions: 6
- News & Resources: 5
- Announcements/Logistics: 11

Evaluation:

Responses: 12

Based on both the registration numbers vs. participation rates and comments on evaluations, most users who registered for the boards did not go on to post or reply, and more than half of posts and replies were made by HIPRC staff in an effort to generate discussion. Based on the evaluations, users liked the overall goals and usability of the discussion board, but lack of time was a major factor they cited for not accessing or using the tool more regularly. In comments, users suggested sending email notifications of new posts and content, encouraging more participation, and integrating the discussion board into existing social frameworks.

The discussion board generated enough interest for webinar attendees to register, but participation and continued engagement with the tool were low. Based on user feedback, additional discussion board events and a system for notifying users of new content and conversations would encourage participation. These changes would require additional staff time and resources to implement and maintain.

Lead Source:

- Webinar: 25% (3)
- Email/Listserv: 41.7% (5)
- Colleague: 25% (3)
- Contractor: 8.3% (1)

How often did you participate?

- Weekly or More: 0
- Monthly: 0
- Less than Monthly: 75% (9)
- Never: 25% (3)

Are you interested in continuing to use the discussion board?

- Yes, as-is: 58.3% (7)
- Yes, with changes: 41.7% (5)
- No: 0

Year 4 and 5 Continuation:

Years 4 and 5 were strongly devoted to dissemination of products and report development for lessons learned. The TBI NPLT implementation model allowed for some of this work to happen as the learning implementation was happening allowing for additional capacity to continue learning webinars.

From October 2019 to February 2020 TBI NPLT members participated in interviews with a communications consultant to identify specific needs and appropriate platforms to use to connect the TBI NPLT members and disseminate reports, resources, toolkits, and other information.

A monthly webinar series on connecting with ICRCs was being planned to start in April 2020 and continue through July 2020. Although COVID ultimately impacted our ability to continue for the next webinar series, we were able to get a couple of sessions in that resulted in further collaborations between members and were able to connect TBI NPLT members with partner agencies as they were able to gain capacity to move forward with conferences in virtual formats. The additional presentations and virtual conferences held and announced in year 4 & 5 from August 2019 through July 2021 include:

- September 2019 HIPRC TBI Lightening Talk at Safe States Alliance Annual Meeting NPLT Learning Series Outcomes
- June 2020 University of Oregon, Center for Brain Injury Research and Training (CBIRT) Return to School Research Project
- August 2020 promoted virtual conference for partner, Boston Children's Hospital Sport Related Concussion and Spine Injury Conference.
- November 2020 promoted virtual conference for partner CBIRT Child Brain Injury: Moving Research to Practice

- March 2021 Washington Statewide Traumatic Brain Injury Advisory Council (TBIC) -Best Practices Addressing COVID: Establishing Virtual Support Groups. Attendance: 31 participants from 7 states.
- March 2021 promoted webinar series for partner, the Administration of Community Living TBI Tuesday webinar series Equity in TBI work.
- April 2021 promoted partner Michigan Concussion Center's quarterly TBI webinar series. April highlighted SHRed Concussion
- May 2021 Building Capacity conference series hosted by TBIC and CBIRT: Day 1: Best Practices in Return to School Support Teams
- July 2021 promoted partner Michigan Concussion Center's quarterly TBI webinar series. Presentation from Stan Herring with Harborview Injury Prevention & Research Center's on *Youth Sports Concussion: Addressing Athletes with Persisting Symptoms*.
- July 2021 Building Capacity conference series hosted by TBIC and CBIRT: Day 2: Understanding Current Policy, Legislation, and Advocacy Movement

Additional sessions for the Building Capacity conference series had been planned through May 2022 in anticipation of continuation of the RNCO and NPLTs.

Phase 3: Communications and Dissemination

During the Safe States Alliance Annual Meeting and early part of year four from August 2019 to October of 2019 a call for team members with communication experience to sit on the core communication team for Phase III of the project was conducted. We did not get a response from NPLT members from these efforts and those we reached out to directly stated they did not feel they had sufficient communication planning skills to be helpful or they did not have capacity. The RNCO was already preparing to initiate a contract for a communications consultant for the broader regional network so the decision was made to add the TBI NPLT into the work to ensure the specific needs for the NPLT were met and would have a distinct place.

DOH contracted with Halycon Consulting to evaluate and inform the RNCO on communication needs and strategies to inform the Western Pacific Injury Prevention Network and the Traumatic Brain Injury National Peer Learning Team. Halcyon developed and initiated a needs assessment and focus group process to identify the unique communication needs for these collaborative groups and to hold both group and one-on-one interviews. From this information Halcyon created recommendations on useable platforms and features needed in the communications plan as well as maintenance and management of content. The overall report can be found in Appendix F. The proposed site map for the TBI NPLT under the WPIPN site can be found in Appendix G.

This report was to be shared with the contractor for phase II, who was to build out the platform and guide content management. This project was severely impacted by COVID and was put on hold until August 2020 at the start of year 5 when we expected the pandemic response in Washington State to be under control. Unfortunately, the impacts continued through 2021. In February of 2021 the RNCO got approval to continue the contracting process with the understanding that any COVID response needs would require further delays for this non-COVID specific issue.

We adjusted our timeline again based on this limitation with an acceptable completion by the end of year 5 in July 2021 and then continue the project with funding in the next iteration. Unfortunately, we learned that the RNCO funding would not be open to states and instead was re-directed to Safe States Alliance under their cooperative agreement. Recognizing this change had the potential to impact sustainability of our communications platform for the regional network and NPLT we reached out to Safe States Alliance about taking over management of the platform if we had it built. Safe States Alliance was concerned that since the site would not be embedded under their current systems that it would be too cumbersome both from a management perspective and on-going funding for site that it would not be in their best interest to take it over.

Without the commitment of Safe States to continue the website, the usability and sustainability of building such a complex communications tool with only a few months of use was not sufficient to continue as an acceptable and reasonable use of funding. After consultation with

the DOH RNCO project officer the communications plan was abandoned, funds were diverted to address Shared Risk and Protective Factors for the larger WPIPN regional network.

During year 4 and 5 the communications and dissemination activities were done through presentations at Safe States Annual Meeting sessions, DOH web page, and the TBI NPLT GovDelivery listserv. Links to research on-going through our research partners at the University of Michigan Injury Research Center and Harborview Injury Prevention and Resource Center as well as research at Mt. Sinai were posted on our NPLT webpage at DOH. Resource links connecting members to the Brain Injury Association of America, CDC, and Safe States were also posted on the NPLT website. Between August 1, 2020 and 7/31/2021 the TBI NPLT webpage received 45 page views with an average page viewing time of 6 minutes and a bounce rate of 58.62%. From August 1, 2019 to July 31, 2021, thirty messages were sent out to the TBI NPLT to inform about research publications, webinars, conferences, best practices, available toolkits or data, and other resources and information relevant to TBI prevention and research.

Special Emphasis: Impacts from COVID-19 pandemic

In March of 2020, as the COVID pandemic began to escalate rapidly, many states experienced shutdowns to help stop the spread of the virus to protect lives and stabilize the hospital systems. These shutdowns started in March 2020 in Washington state and continued in phases to some degree through the remainder of the year. DOH being the lead public health office for the state experienced a heavy load to support public health focused on slowing and controlling the spread of COVID-19. This resulted in many offices and staff having time re-allocated temporarily to work on incident management teams to address this threat.

The RNCO leader was one of these staff impacted and vital work addressing COVID continued almost continually until February 2021. Along with impacts seen at the RNCO office, many of the WPIPN partners saw similar impacts. Combined, this greatly impacted the capacity of the regional network and TBI NPLT to maintain regular engagement. When we did hold webinars, we saw extremely reduced numbers in participation. Research centers seemed to have a quicker recovery than public health sites, with state and local public health members consistently reporting impacts from COVID to their work and ability to connect to community members even after shutdowns ended.

The capacity issues from COVID-19 forced us to reach outside the RNCO further and have greater reliance on our partners as things opened up. The positive aspect of this was that we were able to connect members with a number of conferences that were virtual and free that otherwise would have had significant cost for the typical in-person showings where members would have had to choose between conference to attend or not attend at all due to budget constraints on their individual programs.

Probably the largest impact from COVID was on our planned communications plan that we had hoped would better connect public health and medical professionals to TBI researchers and each other. Without COVID, even with later funding moving away from the states, the communication platform could have built and in-place and more time available to find a suitable plan for transition as Safe States took over the RNCOs. This would have provided an opportunity and a vehicle to enhance collaboration across the diverse TBI prevention field.

Lessons Learned Summary

Several successes and lessons learned can be seen throughout this report. A few key points will be highlighted here in this section.

A key success was reaching the medical community to improve awareness and knowledge of TBI and concussion screening, recognition, reporting and early treatment. We were able to provide continuing nursing education (CNE) units for nurses attending our early research symposiums. Being able to provide incentives for engagement, especially for those in the medical or first responder fields increases attendance and participation. These fields and other positions that are high demand often find it difficult to get time away from their daily duties. By providing a resource that assist them in recertification or renewal of licenses it gives them incentive to attend and provides them with leverage with their organizations to get coverage for them to attend.

Another key success was the broad reach in participation. The TBI NPLT did not limit ourselves to only a national reach. As we engaged with researchers during planning and talked to them about research they followed we quickly recognized valuable research across the globe. Through those collaborations with researchers we were able to get information out to researchers in other nations to follow and comment during sessions to expand our learning. Of course, international reach has some limitations due to time differences but within a virtual environment it also opens us up to opportunities to engage with experts from all over the world.

One success was development of new collaborative partnerships. One example of this was the Washington Statewide Traumatic Brain Injury Advisory Council connecting with the Center for Brain Injury Research and Training after a TBI NPLT presentation to learn more about Return to School after a TBI strategies. From this they formed a partnership that has blossomed from building RTS guidelines and resources for Washington schools to holding conferences and community engagement projects around building awareness of TBI for local communities through community prevention coalitions.

Additional key takeaways regarding the structure and process of the NPLT. First, there was an element of "building the plane while flying it" that occurred at the start of the project. This stemmed from a misalignment of training availability on the foundational framework of Systems Thinking from the scheduled timeline of product development provided in the initial application from CDC. There was an expectation from CDC for RNCOs to begin setting up teams prior to having the tools from the Systems Thinking training to pull that all together. Related to this with the complex nature of this work some of the early products required advance planning or contracts and had to be established before the training and really knowing what was involved in the process. There was some ambiguity from CDC on what the NPLTs would produce or the structure they would follow. This freedom of thought and design could be beneficial and provide space for creativity but there was so little structure and guidance it was difficult to know what goals needed to be worked towards. There were frequent questions from our early initiators on the core advisory team of, "what does CDC want us to do?". Providing them with

the freedom to identify the products based on their needs in the TBI field did not satisfy them. They wanted more structure.

We experienced considerable pushback on using the stock and flow maps from the systems thinking process. About half of the core advisory group stated they were struggling too much with understanding this new concept to them and felt it was slowing down the process. We ultimately switched to a more logic model framework for visualization and allowed the systems framework to work in the background. Had more time been devoted in year one to train and workshop with partners on system thinking we likely would have had greater success overall moving forward.

Another key lesson learned is a strong communication plan is essential for success. Having the first year or even the second year include a focus of building a formal communication plan would have provided structure and planned content that likely would have also helped mitigate some of the impacts from COVID-19 or any other large scale natural or economic disaster. Having a dynamic interconnected communications platform where members of an individual NPLT could connect with each other or with other NPLT topics for cross collaboration would have greatly enhanced the learning connections. These types of systems are costly in both time and money and was not feasible within the available funding of the current NPLT project, but should be taken into consideration for future endeavors, especially when they will be virtually based.

In this project each RNCO led a specific topic NPLT. This was good as it spread the load and provide some stability in capacity given the limited funding. However, CORE SVIPP funded sites were expected to address each of those topics and participate in the NPLT's which gave them five additional groups to collaborate with. If the RNCO's had held their own quarterly workgroup to discuss cross-promotion, challenges in initiating NPLT strategies, and other operational issues it would have provided greater support and capacity and would have better aligned the RNCOs in data collection for evaluation by Safe States Alliance and CDC on the project.

Finally, collaborations and partnerships are necessary to leverage positive outcomes. The TBI NPLT leveraged a wide range or partnerships and built new collaborations across the project for success. In this case it was done out of necessity from a very limited budget, but even with four times the budget collaborations and partnership would remain a necessity. Collaborations and partnership expand our reach at all levels to our audience and to other professional addressing these issues and provide opportunity for innovation.

Appendices

Appendix A

TBI NPLT SWOT Analysis

The purpose of the SWOT is to conduct an internal analysis that can be used to plan for the development and roll-out of the National Peer Learning Team (NPLT) for Traumatic Brain Injury (TBI) led by Washington State Department of Health as the Regional Network Coordinating Organization (RNCO). This is a working document to be updated as frequently as necessary to aide in planning and situational awareness purposes.

Methods: Three internal DOH staff working closely with the Washington State TBI council completed the SWOT. The results were shared with partners in the TBI council for further feedback and input. Aggregated results facilitate brainstorming next steps in planning/developing the NPLT for TBI with Washington State partners from the TBI council, Washington State's RNCO, and CDC.

Washington State's RNCO's vision for TBI National Peer Learning Teams is to move the field of injury and violence prevention forward by informing and sharing best available evidence from science, program and policy as it relates to TBIs. In the first year of funding, CDC and RNCO's will collaboratively develop an approach for rolling out the national peer learning teams. Evaluation of the approach will help identify opportunities for improvement to initiate throughout the 5-year funding period. This activity will require an adaptive learning style and systems thinking.

Strengths	<u>Opportunities</u>
 Developed regional peer learning team (PLT) approach Have on going relationships with leading researchers in the field of TBI through UW/Harborview Have on going relationships with BIAW Have connections through School and Sports through OSPI Knowledgeable and skilled in providing long distance resources and training utilizing current modern technologies available Established partnership with NWCPHP for training Resources through Safe States. Good Collaboration with other regional networks Strong peer network within the veteran's community. Have ongoing relationship with WDVA TBI program. Research support from VA in Washington 	 Strengthen relationships with OSPI to reach target audiences in school athletics and academics. Diversify key stakeholder and unique partnerships that may flow over to other Injury Areas Harborview Injury Research Center is a leader in TBI research from many angles. Share model tools and materials, best practices between regional networks Possible publication or speaking engagements Improve/facilitate research to practice in TBI Build partnerships/collaborations with ICRC's across the nation. Strengthen work of TBI and field of Injury Prevention through Systems Approach principles Build knowledge and skill base of cross-regional partners on TBI Connect Cross-Regional partners directly to top leaders in the field of TBI which will aide in development of continued research which will lead to increased implication of effective strategies.
	Evaluation of rate of TBI among incarcerated population.

	 Partnership with Brain Energy Support Team (BEST) to connect TBI peer networks. Establish/lead "best practices" in the areas of behavioral health and TBI, school/sport post-concussion treatment Increase diversion/awareness of TBI in criminal justice system. Develop universal practices guidelines for post-concussion treatment at urgent and emergent care centers. Increased conferences/summits available to rural communities. (maybe technology based) Stronger support awareness for those with TBI transitioning from active military and prisons back to the community.
Weaknesses• Regional IPRC at Harborview not currently funded limiting resources.• No CDC funded IPRC's near our region.• Evaluation is difficult to measure• Geographic barriers limit face-to-face engagement• WaDOH limits technologies that can be used.• Current grant funding is not sufficient to support implementation work at local levels.	 Threats Not currently a consistent web-based platform for supporting webinars, archiving resources, etc. Unfunded states may not have motivation or resources to engage. Topic area is expansive and may not be able to cover full spectrum. Need for partners (non-profit and academic) to buy into the approach and communicate the value Sustainability – keeping participants motivated and participating Having sufficient resources to support content experts to research, develop, and disseminate needed information and practices.
 Post-concussion treatment and referral is not universal in county and regional hospitals/care centers. Rural communities are underserved. Tribal communities are underserved and underrepresented in research. Mild TBI often discounted in the overall/long-term severity/damage experienced indirectly. 	 Lack of knowledge/skill in injury prevention to move from research to practice beyond information sharing. Misperception by general populous that mild TBI is no significant concern and dismissal of ongoing symptomology. Current criteria call for functional limitations at such a level that reasonable accommodations are often not considered as the ADA does not apply (i.e. computer screen filters, turning off fluorescent lighting.

Appendix B

Project Timeline





Appendix C

TBI Webinar Topics

2017 – Pediatric TBI – 320 registrants

TBI and Public Health

Guidelines for Acute Care

Car Seats and Seatbelts in TBI Prevention

Child Abuse & TBI

Rehabilitation Needs, Practice and Outcomes for child TBI

Return to Learn Challenges and Solutions

Recommendations for Return to Play

Emergency Stabilization for Pediatric TBI

2018 - Best Practices in Adult TBI - 73 registrations

Psychological Sequelae of TBI injury

Rehab and long-term outcomes

Prehospital care

Special considerations with Elderly

In-Hospital Care

Intersection of TBI and Domestic Violence

Return to Learn/Play - TN Safe Stars Program for Youth Sports

Abusive Head Trauma Prevention/SBS – Trainings to hospital staff to provide education to patients

Social Norms in TBI/Concussion reporting - The BANK study at Univ. of North Carolina – Concussion Disclosure

Brain Injury and Domestic Violence – Nebraska Dept of Health and Human Services

Continuum of injury care with TBI and bridging research, public health, and treatment – Harborview Injury Prevention & Research Center

Fall Prevention Among Older Adults & Evidence base group exercise for fall prevention – HIPRC and UW with Sound Generations, Seattle, WA – 224 registrations

2019 – Innovative Practices in TBI Prevention

Health Disparities in Traumatic Brain Injury & the BRITE Project– University of Washington and Baylor. Scott & White Institute for Rehabilitation, Dallas, TX – 114 registrations

Pediatric Concussion and Return to Learn – Student centered plans for RTL in HS and School Nurse support. HIPRC and Renton School District, Renton, WA – 353 registrations

Ask the Experts: TBI and Domestic Violence Live Chat – Brain Injury Alliance of Nebraska and Nebraska Dept. of Health and Human Services.

2020 – Screening validation with special populations - Washington State Department of Social and Health Services – Children's Administration

Return to School Oregon's CBIRT program; Facilitating evidence-based practices

2021 – WA

Relevance to practice 100% somewhat to very 98%, 89% - 95%

Quality of Course 74% very good to excellent 68%, 56% 85%

Level of Content: 92% about right 88%, 100% 81%

Sectors reached: Community and National Stakeholder, 132, ICRC's 9, Trauma Centers 24, Rural Agencies, 19; Educators 8%, Public Health 29%, Medical 35%, students 8%, Researchers ~15%, Brain Injury Support workers, Rehab specialists, Physicians 14%, Administrators

Appendix D

NPLT Individual Plan Review – High-level Summary WASHINGTON: Traumatic Brain Injury (TBI)

HIGH-LEVEL HYPOTHESES/QUESTIONS

 Plans often need more-focused, high-leverage problem(s) and hypothesis(es) to focus on

Learning focus?

It seems that your ultimate purpose is to learn if there are high leverage ways to reduce TBI through policy and community engagement. How does that sound? And do you have any hypotheses about what types might be most effective...what gaps in knowledge are there...etc...?

• SHORT-TERM/ACHIEVABLE OBJECTIVES

- Plans need achievable short-term objectives to reflect progress from year to year, and at end of 4 years
- Tracking/capturing how NPLT pulled partners together, what learned is important; CDC interested in these kind of objectives/end-of-project reporting

• PEER-LEARNING TEAM APPROACH

Provide clarification/additional details about how teams can take a true Peer
 Learning Team approach vs. typical regional network approach

• VISUALS/SYSTEMS MAPS

 Most teams need additional visual(s)/map(s) to visually depict and communicate the problem/hypothesis, and to help ID where work is needed/gaps exist to focus their NPLT work

• TEAMS WITHIN EACH NPLT

- Core vs Extended vs Other Teams
- Need to think through more how they will work
- Process & Communications:
 - How will NPLTs work across multiple groups (core, extended, SAVI Sisters, RNCO Leaders, CSCRS/HRSC, etc) to consolidate info/input, synthesize common/ different input, and share across groups? How will they ensure each group doesn't end up being separate silos of info/input/expertise, or require duplication of efforts to communicate same/similar info multiple times across these multiple groups?
 - Include step to reassess groups that were initially formed and if/how to continue/adjust them
- o Conversational Capacity TA likely needed from Chris for all NPLTs

• SHARE EXAMPLES

• Share examples among NPLTs of plan sections that are strong

Attribute	Strengths	Areas in need of support
Overall completeness of the plan	 This is a good start – the outline will help to build a more complete plan. 	 Some elements included, but not clear how all will be held together Very general outline; need more specifics; add concrete activities – how will partners be engaged in these activities – how will the plan inform the development of products for the filed? Purpose not clearly stated/related to learning objective – bringing awareness shouldn't be ultimate goal; need to tie to program/policy engagement; how build confidence that this is high-leverage solution? NPLT members mostly/all already engaged/ informed in TBI; need to focus on more relevant/important objectives (already have choir, what do they need to move forward?) Need distinction between peer learning vs regional activities For future iterations of this plan, additional information regarding the mental model of learning for TBI would be helpful, including information around upstream concepts to further explore, theorized leverage points, and mapping onto a systemic approach Provide more explicit information about evaluating the plan, including data and how to adapt to relevant findings, may be beneficial
Focused on learning	 The plan is focused on awareness, buy in, and increased understanding for 	 Purpose statement doesn't appear to have a learning focus as it jumps immediately to a solution – develop a plan and act on the plan.

(vs discrete projects)	TBI, which is all learning based.	 Awareness may not be as necessary to the audience of the NPLT – you are building a learning community for those already engaged in the work – they'll want to learn from others practicing and the newest research that may help them in their existing work
Likely to advance the field	•	 Not clear; How will this group know it has been successful? What will success look like for this group? Given that the plan's specific activities are not thoroughly presented, it is difficult to see where they may be innovative or expected to be impactful. Providing clearer understandings of barriers and gaps as they are currently understood would better inform whether this plan would result in impact
Reflects application of systems thinking (ST) & adaptive learning (AL) principles in plan	 The plan highlights elements and benefits of a systemic approach, including political, societal, and community elements (but does not expound upon them). 	 Plan has not expanded since July meeting Applications of ST & AL not evident; the plan does not provide systems mapping or clearly articulate how adaptive approaches may be necessarily for this issue Has there been opportunity to work with larger group? How can planning group be broadened beyond NW focus, to give a more national perspective and to more truly create a NPLT?
Clearly defines structure, processes, and activities to support NPLT	 Details often missing, but these are all started. 	 The plan does not provide enough structure or processes for their learning objectives. Activities are provided, but only at a high level without much detail.

purpose and goals		 Need more beyond raising awareness, and specific who needs awareness-raising May benefit from reviewing strong sections from other NPLT plans
Feasible given NPLT capacity	•	 The limited description of the plan makes it difficult to determine plan feasibility. 1-2 webinars/yr may be feasible but not necessarily effective ID more-focused, high-leverage problem and hypothesis to focus on? TA from Chris could include better developing more specific hypothesis
Supports an adaptive learning approach going forward	 The plan provides a list of skills that are required to develop meaningful co- learning, which will encourage an adaptive and collaborative environment 	 Not clearly stated; plan doesn't provide an adaptive learning outline It might be helpful to hone-in on a more specific high-leverage problem to address
Consistent with CDC parameters and specifications (i.e.,) scope, issue framing; use of resources	•	 Appears to be NW-focused, rather than national

Appendix E

Products Created and/or Disseminated through the webinars from the NPLT

The BANK Study – University of North Carolina

Development of a theory-driven educational intervention to improve concussion prevention, detection, and care by combining training and education with excellence in clinical care by addressing norms and personal beliefs around concussion disclosure.

CDC STEADI Toolkit - Centers for Disease Prevention and Control

Recommendations for fall prevention among older adults.

Enhance Fitness - Sound Generations

Evidence-based older adult exercise program, with demonstrated improvement in skills associated with reduced fall risk.

Return to Learn Packet - Harborview Injury Prevention & Research Center (HIPRC)

A toolkit for schools to support students who have been diagnosed with a concussion, with a focus on communication and individualized plans for affected students.

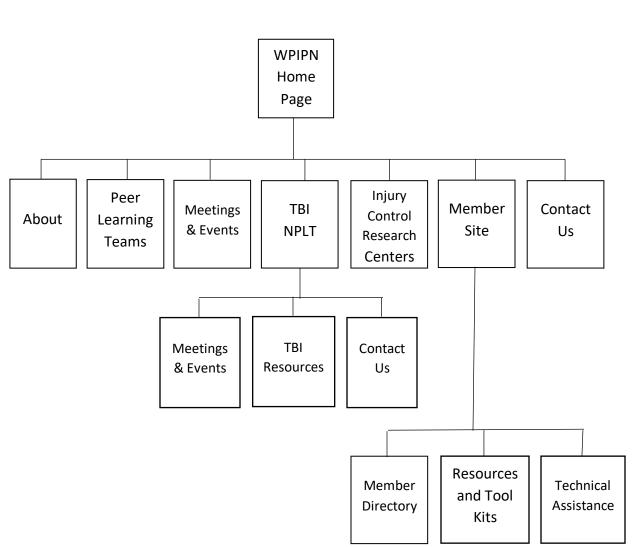
HELPS Brain Injury Screening Tool - Developed by International Center for the Disabled, updated by Brain Injury Alliance Nebraska & University of Nebraska Lincoln

A screening tool to identify the possibility of a brain injury. Note: HELPS is not a medical evaluation or diagnosis tool.

Injury-related Health Equity Across the Lifespan (iHeal) research program - HIPRC and the University of Washington School of Social Work

A program focused on improving health disparities research and promoting health equity across the field of injury prevention and control.

TBI NPLT Proposed Web Site Mock Up



<u>Site Map</u>

TBI NPLT Page

Page Links

About Peer Learning

Teams

Meetings & Events

TBI NPLT

Injury Control

Research Centers

Member Site

Contact Us

Page provides description of the Traumatic Brain Injury National Peer Learning Team and current workgroup focus areas and how to join.

Meetings and Events will show current virtual platform connections to workgroup meetings and archives of any past recorded meetings or webinars.

Other NPLT's will provide a description of the other CORE SVIPP National Peer Learning Teams and who to contact to join.

Sub Pages

- Meetings & Events
- TBI Resources
- Contact us

TBI NPLT - Meetings and Events Sub Page

Page Links

About Peer Learning

Teams

Meetings & Events

TBI NPLT

Injury Control

Research Centers

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- Highlight or Description of upcoming events/conferences/webinars hosted by TBI NPLT or Partners
- Meeting/webinar virtual connection information
- Archive Links for past meetings/webinars

TBI NPLT – TBI Resources Sub Page

Page Links

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TBI resources will list workgroup or partner develop resources or best practice tool kits with links to the resource, publisher, or research center that owns or manages.

TBI NPLT – Contact Us Sub Page

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Contact Us link goes to contact form

(This would pull up a form for general inquiries and to join. Not sure if that would be considered a separate page or would just be a link on the main TBI NPLT page.)