



The Brain Builders Lab was a joint initiative of the Canadian Centre on Substance Use and Addiction and the Alberta Family Wellness Initiative. Its aim was to move Brain Story science, which links childhood trauma to later health outcomes, into action. Between 2019 and 2021, participants in the Brain Builders Lab undertook projects to spread and embed Brain Story science in their communities. This case study along with the others in the series provides practical advice on how to develop and implement projects, along with project impacts and lessons learned.

Horizon Health Network

Brain Builders Lab Case Study

Project Team

All team members are from Horizon Health Network

- Denise Connors, (retired) Manager, Population Health; Co-lead for the Self-Healing Communities Initiative, Saint John
- Kelly Sterling, Education Coordinator, Addiction and Mental Health Program, Fredericton
- Dawn Maskill, Program Manager, Addiction and Mental Health Program, Fredericton
- Heather Chase, Community Developer, Population Health, Saint John and rural communities of southwestern New Brunswick; Co-lead for the Self-Healing Communities Initiative, Saint John
- Mark Vickers, Psychologist, Child and Youth Services, Addiction and Mental Health, Saint John
- Julie Belliveau, Social Worker, Mental Health and Addictions, Moncton
- Kim Scott, Public Health Nurse, Home Visitation Program, Miramichi
- Angela McGraw, Nurse Practitioner, Private Practice, Saint John

Location

- New Brunswick

Introduction and Project Goals

Horizon Health Network operates 12 hospitals and more than 100 medical facilities, clinics and offices providing acute and specialized care and community-based health services throughout New Brunswick. Horizon delivers services to approximately two-thirds of the population of New Brunswick, as well as to northern Nova Scotia and Prince Edward Island.

Horizon's Population Health Department released a regional health needs assessment ([Broadening Our Focus: Identifying Regional Priorities from the Needs of Our Communities](#)) in April 2017 that identified several key areas of concern. Recognizing that adverse childhood experiences (ACEs) are a significant risk factor for substance use disorders, mental illness and many chronic diseases, a group of staff at Horizon saw the Brain Builders Lab as an opportunity to solidify and develop a collective impact approach to these issues and to support a shift within Horizon to becoming a trauma-informed organization.



The group assembled an interdisciplinary team to help catalyze a cross-departmental approach to ACEs prevention and mitigation. Their goals were:

- To elevate and prioritize the work across Horizon’s departmental leadership;
- To connect and coordinate existing pockets of work related to the Brain Story that was already underway in different regions and departments; and
- To build greater awareness about Brain Story science and its link to health and well-being within the organization, its partners and the communities it serves.

Priorities identified in Broadening Our Focus

- Alcohol and drug use
- Addiction and mental health services
- Sexual abuse prevention and treatment
- Mental resilience and coping skills in children and youth
- Chronic disease prevention

Knowledge Mobilization Activities

Securing leadership buy-in: Prior to joining the Brain Builders Lab, Denise Connors presented their project goals to community directors who were supportive of the work. This group in turn pitched the idea to the vice president of Community Health at a Leadership Advisory Council meeting. The cross-departmental approach was appreciated and the vice president endorsed the team’s Brain Builders Lab application. Denise has provided two additional progress updates to this group over the course of the past 18 months to keep them engaged in the process. An additional report to the Leadership Advisory Council is scheduled for winter 2022.

Advocacy for systematic embedding: Even though many staff at Horizon had already participated in professional development related to ACEs, the team recognized that a systematic approach to sharing Brain Story science was needed to create organization-wide change. They used a top-down-bottom-up approach by promoting the Brain Story Certification Course (BSCC) from Alberta Family Wellness Initiative to their departmental directors as a tool for staff training, and by encouraging their colleagues, direct reports and practicum students to take the course. The team also advocated for embedding the BSCC into departmental education plans as mandatory training to make the commitment to brain science sustainable. Some managers looked for creative ways to motivate their staff to complete the BSCC, for example, by offering to buy lunch for the first team whose members completed it.

Raising awareness among networks. Kim Scott facilitated a half-day workshop on ACEs and the Brain Story with all public health staff in her area at their annual staff development day, leading to invitations to present at several community tables. Angela McGraw presented the information to all Saint John-area nurse practitioners at a professional development event, and public health nurses from Horizon and Vitalité, New Brunswick’s French-language health authority, presented three, two-hour sessions about Brain Story concepts to early childhood educators. Dawn Maskill presented to the Integrated Service Delivery Child and Youth teams made up of both Horizon and Department of Education staff. All Integrated Service Delivery Child and Youth teams in the Saint John area (90 staff) were encouraged to complete the BSCC and given a year to do so. Through a partnership with the Saint John Boys and Girls Club, Heather Chase was also able to spread the information to a network of community agencies and other government departments.

System engagement: With such a large team, many had strategic relationships that could be used to create broader system-level engagement and support for the work. For example, in her role as a community developer, Heather liaises regularly with the local member of the Legislative Assembly (recently appointed as the minister of health) and presented to her and the minister of education



and their executive staff. She was subsequently invited to participate in the Minister's Roundtable on Mental Health in which the premier also participated. She also presented at the annual Funders' Table of the Boys and Girls Club to align funders around a common knowledge base that underpinned many of their shared goals. One of the members of the Population Health Team is also the chair of the New Brunswick/Prince Edward Island Public Health Association Board. She asked Denise to present to the board to help generate interest in potential cross-provincial work. They also had an expert in ACE-related policy work present to the provincial cabinet, at the end of which the minister of health distributed materials related to the Brain Story.

Outcomes and Impact

Organizational change: Some Horizon teams have included the BSCC as a required or strongly recommended resource in their staff training plans and some departments have developed time frames for course completion (typically one year). This will help ensure the knowledge is embedded and sustainable in the long-term.

Practice change: Angela piloted ACE history taking using the ACE Questionnaire in a primary care clinic. She provided training to all clinic staff and assessed their knowledge and confidence. She and Denise secured the buy-in and support of the Saint John-area primary healthcare leadership team to scale up the initiative to all primary healthcare sites in Saint John, but the pandemic has since become the priority. However, Horizon is setting up a new clinic led by nurse practitioners in Saint John and Angela is planning to train staff and embed ACE history taking in clinic practices from the start.

New funding: To create the larger-scale system change the team envisioned, they applied for and received a \$450,000 social innovation grant to advance the community-based aspects of their work. The grant allowed them to launch a Self-Healing Communities project with the help of ACE Interface, a U.S. company founded by Robert Anda, co-principal investigator of the original ACE Study, and Laura Porter, a former policy maker from Washington State. They used ACE Interface's train-the-trainer program to create 29 master trainers, 12 of whom work for Horizon, who can deliver key messages and presentations in the community. This has helped create additional change agents, has significantly expanded the team's reach and is helping to accelerate their awareness-raising efforts.

Community change: Community-based agencies have started taking up the Brain Story. Family Plus, an agency that provides mental health counselling and family support services in Saint John, now requires the BSCC for all staff. The Anglophone School District South serving the Saint John area has had many of its staff complete the course and the Boys and Girls Club has started sharing key concepts with parents. The New Brunswick/Prince Edward Island Public Health Association Board is planning to make ACEs the target of their next public awareness campaign, which will help extend awareness to the general public and generate support for applying this knowledge in public systems.

Shifting mental models: The language and concepts of the Brain Story are appearing in conversations both within and outside Horizon, and people have reported that the knowledge is changing how they view their clients and that there is an increased focus on the need for upstream prevention efforts. These efforts have helped cultivate additional champions and change agents who are now preparing to apply the knowledge across various practice settings.

Lessons Learned and Next Steps

Capitalize on relationships wherever possible. One of the team's biggest successes was the broad awareness and engagement across Horizon and the community they were able to achieve in a short



time. Being able to get in front of key decision makers was an advantage in securing interest in and support for their work.

Align with organizational culture and goals. The team’s project aligned with community health needs and the direction in which Horizon was already moving. The care they took in positioning the work as a way to support Horizon’s strategic goals was a key factor in their success.

Engage early adopters to create additional change agents and influencers. Existing champions for brain science within Horizon and the community allowed the team to quickly identify and recruit additional capacity to support the work. Although changes in team composition and leadership produced some setbacks, the team viewed this as a strength as it allowed them to engage with and cultivate new champions, while those who moved on continued to act as ambassadors in their new endeavours.

The team remains committed to the prevention and mitigation of ACEs within their services, partner agencies and communities. They plan to present a final report on their project to Horizon’s senior leadership and to identify next steps for practice change within departments, becoming a trauma-informed organization and creating sustainability for the future. With the help of additional funds from Living Saint John, they also plan to continue spreading the knowledge widely in the broader community. The team also plans to partner more systematically with the francophone health authority, Vitalité, in spreading the use of the knowledge province-wide.

Resources

- CCSA impact video: [Health Systems Improvement in New Brunswick](#)

