**Newfoundland and Labrador**

# Stepped Care 2.0©
# E-Mental Health
# Demonstration
# Project

**Final Report**

Mental Health
Commission
of Canada

Commission de
la santé mentale
du Canada

**mentalhealthcommission.ca**

Health    Santé
Canada   Canada

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# Acknowledgements

## Core Project Team

- **Peter Cornish**, e-mental health/stepped care implementation and research project lead, MUN Student Wellness and Counselling Centre
- **Niki Legge**, N.L. government, project co-lead
- **Paula Corcoran**, lived-experience lead, CHANNAL
- **AnnMarie Churchill**, coordinator, MUN Student Wellness and Counselling Centre
- **Lisa Fleet**, evaluation lead, MUN faculty of medicine
- **Sarah Pegrum**, clinical lead, Eastern Health clinical psychologist
- **Josh Rash**, fidelity lead, MUN psychology department
- **Heather Hair**, single session lead, MUN school of social work
- **Brad Yetman**, research assistant, MUN Student Wellness and Counselling Centre
- **Mike Herrell**, lived-experience representative, CHANNAL
- **Alicia Raimundo**, lived-experience representative, Foundry
- **Meghan Churchill**, e-mental health manager, Eastern Health
- **Byron Boyd**, e-mental health manager, Central Health
- **Tracey Wells**, e-mental health manager, Western Health
- **Victoria Kearney**, e-mental health manager, Labrador-Grenfell Health

## MHCC Team

- **Nicholas Watters**, director, Access to Quality Mental Health Services
- **Bonita Varga**, manager, Access to Quality Mental Health Services
- **Danielle Impey**, program manager, Access to Quality Mental Health Services
- **Galin Kora**, monitoring and evaluation specialist, Organizational Performance

# Executive Summary
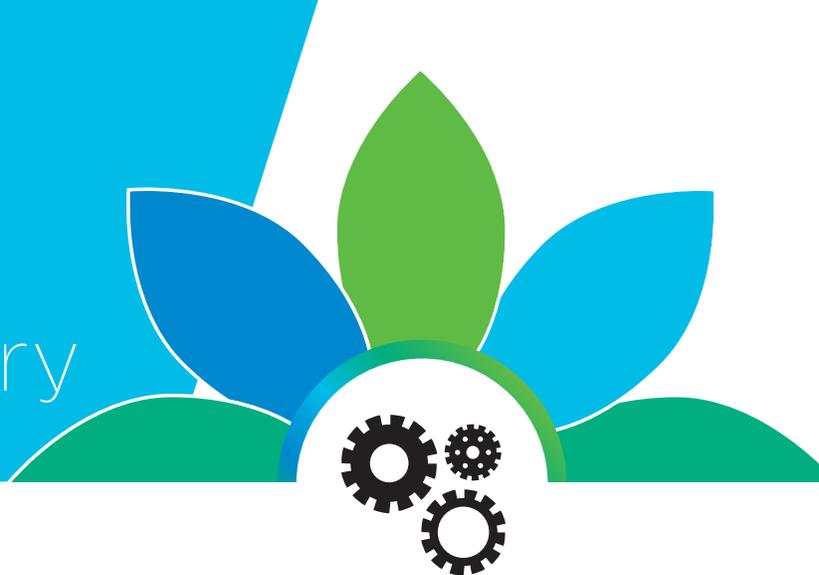
The Newfoundland and Labrador Stepped Care 2.0* e-mental health demonstration project was launched in September 2017. It was made possible through a partnership between the Mental Health Commission of Canada (MHCC), Memorial University of Newfoundland (MUN), the Government of Newfoundland and Labrador (N.L.), its four regional health authorities (RHAs), and CHANNAL.

The introduction of Stepped Care 2.0 is part of a mental health system transformation taking place across N.L. Based on the model developed and implemented in the U.K., stepped care offers an evidence-based, client-centred stage system of care that prioritizes the most effective and least intensive treatment. Our demonstration project focused on implementing and evaluating the Stepped Care 2.0 model, which consists of rapid access single session clinics, recovery-oriented treatment principles, and e-mental health programming offered with each step. The U.K. model helped stakeholders see how new approaches and access options could fit with more traditional programs while introducing them to recovery-oriented, strengths-based practices.

Initially, N.L.'s Stepped Care 2.0 training sought to integrate recovery-oriented practices. More recently, it has become a more coherent and accessible system of care through the integration of e-mental health programs into each stage of care. These programs allow clients to access mental health care how, when, and where they prefer to receive it. Much of the training, implementation, and change management for staff and managers was undertaken to support *Towards Recovery: The Mental Health and Addictions Action Plan for Newfoundland and Labrador*. This action plan responds to recommendations set out in a report by the All-Party Committee on Mental Health and Addictions that focused on mental health and addictions reform.

This document outlines the context for the e-mental health demonstration project and describes its objectives, methods, and implementation phases, along with preliminary data collected between September 2017 and March 2019. It also incorporates observations from project team members and experts across Canada who attended a November 2018 Toronto-based quality improvement workshop on the project.

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\* Stepped Care 2.0©, coined by Peter Cornish, is under copyright. Throughout this document it will appear as Stepped Care 2.0.

# Key Messages

- Stepped Care 2.0 is a promising model for integrating e-mental health interventions, recovery principles, and single session rapid access counselling with traditional (or established) in-person programming on a provincial scale.

- E-mental health programming can best be implemented in jurisdictions with the political will to achieve mental health system change, which, among other things, provides an environment that enables measured risk taking and innovation.

- The principles of recovery-oriented practice – such as person-first and holistic care, choice and autonomy, dignity of risk, and client-provider collaboration – are key values for implementing Stepped Care 2.0 and transforming mental health care. People with lived experience and their families should be at the centre of care.

- Large-scale implementation of Stepped Care 2.0 and e-mental health at the provincial level requires dedicated staff positions, including a provincial project lead, site implementation managers (e-mental health managers), dedicated trainers (Stepped Care 2.0, single session, e-mental health, etc.), and cross-site coordination, evaluation support, and implementation expertise.

- Implementation of Stepped Care 2.0 that includes e-mental health requires early and frequent engagement with a diversity of stakeholders, including medical and non-medical service providers, people with lived experience and their families, policy makers, researchers, community mental health organizations, and others with specialty expertise (e.g., IT).

- Implementation of e-mental health requires careful attention to system integration, change management, training, and platform development.

# Background

The purpose of the e-mental health demonstration project was to identify ways to improve access to publicly funded mental health services through the implementation and evaluation of Stepped Care 2.0. Led by a multi-stakeholder team under the expertise of Peter Cornish, associate professor and then-director of the MUN Student Wellness and Counselling Centre, the 18-month project was carried out over 17 sites (15 community-based locations and two primary health-care clinics) across N.L.

The province is committed to improving access to evidence-based mental health and addiction services. To that end, in June 2017 the All-Party Committee on Mental Health and Addictions outlined its response to the need for system change in *Towards Recovery: The Mental Health and Addictions Action Plan for Newfoundland and Labrador*. Our demonstration project aligns with several recommendations in this action plan, including implementing and evaluating stepped care and integrating e-mental health services.

Our project also coincided with considerable innovations already under way to transform the province's mental health and addictions system. Before it began, all mental health and addictions staff had already received training in recovery-oriented practice* and single session/solution-focused interventions. N.L. was also in the process of expanding its existing suite of e-mental health services: it made available for all N.L. residents such online tools as BreathingRoom, Bridge the gApp, and MindWell-U's 30-Day Mindfulness Challenge, along with programming from the Strongest Families Institute for anxiety and behavioural issues in children and youth age three to 17 (by referral). Likewise, Therapy Assistance Online (TAO) had been set up at 15 of our 17 project sites (later expanded across the province as both a self-help option and a counsellor-assisted service).[†]

The project endeavoured to scale up, promote, expand, and explore ways to implement e-mental health programming by applying stepped care principles. Stepped Care 2.0 was adapted to existing provincial theoretical models (i.e., recovery-oriented practice and upstream approaches like MindWell-U and Doorways[‡] walk-in counselling). We planned to scale up programs by demonstrating how to prepare and support medical and non-medical providers in using e-mental health tools – either as part of routine practice or as an alternative (or addition) to medications or referrals to specialist psychotherapy. More specifically, the project intended to pilot diverse change management and readiness-for-change strategies to maximize stakeholder engagement with proven programs. Through planning, consultation, training, trial and error, and collecting qualitative and quantitative data, the project sought to introduce Stepped Care 2.0 in a recovery-oriented way. It also set out to collect data that could be used to inform and adjust treatment decisions in keeping with stepped care, while moving away from a one-size-fits-all approach.

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\* Using The Recovery Approach, developed by a local peer-led organization, CHANNAL, and based on the MHCC's *Guidelines for Recovery-Oriented Practice*.

† See details of these e-mental health tools under Project Objectives.

‡ Doorways offers single session therapy services to those who feel they need to speak to someone right away, on a first-come, first-served basis.

# Population Needs

Mental health and addiction referrals in N.L. are "steadily increasing in each of the four regional health authorities" (p. 17).[1] Between 2014 and 2016 the number of people waiting for services rose by about 56 per cent[2] (p. 26):

*On average, there are 20,000 referrals yearly; approximately 12,000 calls placed to the 24/7 provincial Mental Health Crisis Line; and, about 3,000 admissions to inpatient mental health and addictions services, 15 percent of which are for treatment of concurrent mental health and addiction disorders.[3] (p. 17)*

According to the all-party committee, timely access to mental health and addictions services in the province was a significant and worsening problem. As one participant told the committee: "'Mental health and addictions issues don't do well on wait lists'" (p. 26).[4]

The MHCC further reports that "up to two thirds of adults and three quarters of children and youth do not access services and supports to help them address their mental health concerns" (p. 4).[5] This is partly due to the stigma surrounding mental illness and addiction. A 2014 mental health and addictions anti-stigma survey by M5 research found that only 44 to 54 per cent of N.L. residents would "be very likely to discuss a mental illness or addiction" (p. 12).[6] In response, the all-party committee acknowledged that "not seeking help may also be attributed, in part, to long wait lists and difficulty finding services in a complex health care system. As efforts to reduce stigma, raise awareness and improve system navigation occur, the demand for services continues to grow" (p. 13).[7]

The all-party committee repeatedly heard that system change was needed to provide timely access and effective treatment and to support prevention, promotion, and early intervention for mental health and addiction problems. Those were key factors in its recommendation to introduce a stepped care approach, which matches mental health needs to the most appropriate level of care (see **Figure 1**). Stepped care can provide immediate access to lower-intensity services (that will likely meet the mental health needs of a substantial portion of the population) while taking pressure off growing wait lists for those who need higher levels of specialized care. Delivering stepped care, however, requires a range of services to meet unique needs and a greater focus on prevention and early intervention. The committee endorsed the inclusion of self-managed programs, counselling (in person and through technology), peer support, addiction management and treatment, single session walk-in clinics, crisis services, and support for families and caregivers.

**FIGURE 1.** STEPPED CARE AS CONCEPTUALIZED IN THE TOWARDS RECOVERY REPORT
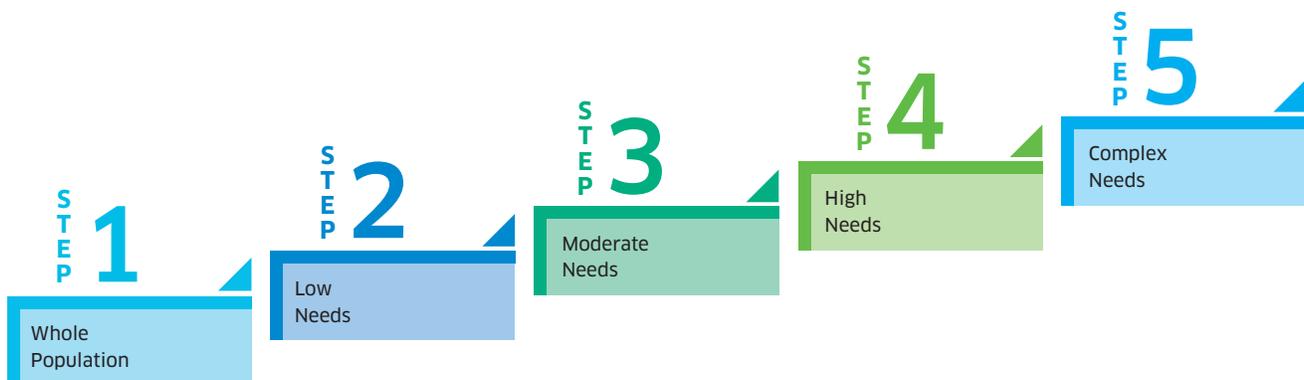
# Introduction to Stepped Care 2.0

Stepped care is an evidence-based system of intervention stages. It uses outcome monitoring to ensure that clients first receive the most effective and least intensive treatment. Based on an initial assessment, the client and clinician agree on the lowest intensity intervention warranted. Care is later stepped up or down depending on what the client needs or prefers based on the continual monitoring of outcomes.

Stepped Care 2.0[8] extends the original U.K. model, as well as O'Donahue and Draper's re-imagined version,[9] by including health and mental health promotion and illness prevention activities.* Under Stepped Care 2.0, programs can be selected and arranged based on cost as well as levels of intensity and engagement. The model can therefore facilitate administrative decision making and community collaboration (see **Figure 2**).

It also aims at empowering clients to maximize and manage their own wellness. Stepped Care 2.0 works like a family physician practice with a rapid access walk-in clinic. Clients making a first visit are seen on a walk-in basis usually within 60 to 90 minutes. Rapid access is important because early intervention is key to preventing deterioration in health and mental health. The model draws heavily on the latest health outcome research and the emerging single session therapy literature.[10,11,12] Single session and stepped-care systems have no wait lists and no set session limits. Duration, interval, and intensity are adjusted based on the continual monitoring of outcomes, readiness, and the therapeutic relationship.

To begin stepped care, the client works collaboratively with an experienced provider to assess and determine the best available combination of resources or programs related to their level of need and presenting issues. After the provider goes over the stepped care approach with the client, they work together to develop a tentative written treatment plan (see sample in Appendix A).† Plans are revisited and revised as additional information becomes available (depending on the extent to which planned goals are attained and symptoms resolved). While some followup sessions are scheduled, with others, the onus is on clients to make such a request (as needed). Client circumstances determine when sessions will occur and how long they will be.

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\*   Otherwise referred to as healthy community action.

†   The client and the provider each retain a copy of this plan. Stepped care is inherently collaborative and actively involves clients in decisions about their care.

**FIGURE 2.** OVERVIEW OF THE STEPPED CARE 2.0 MODEL
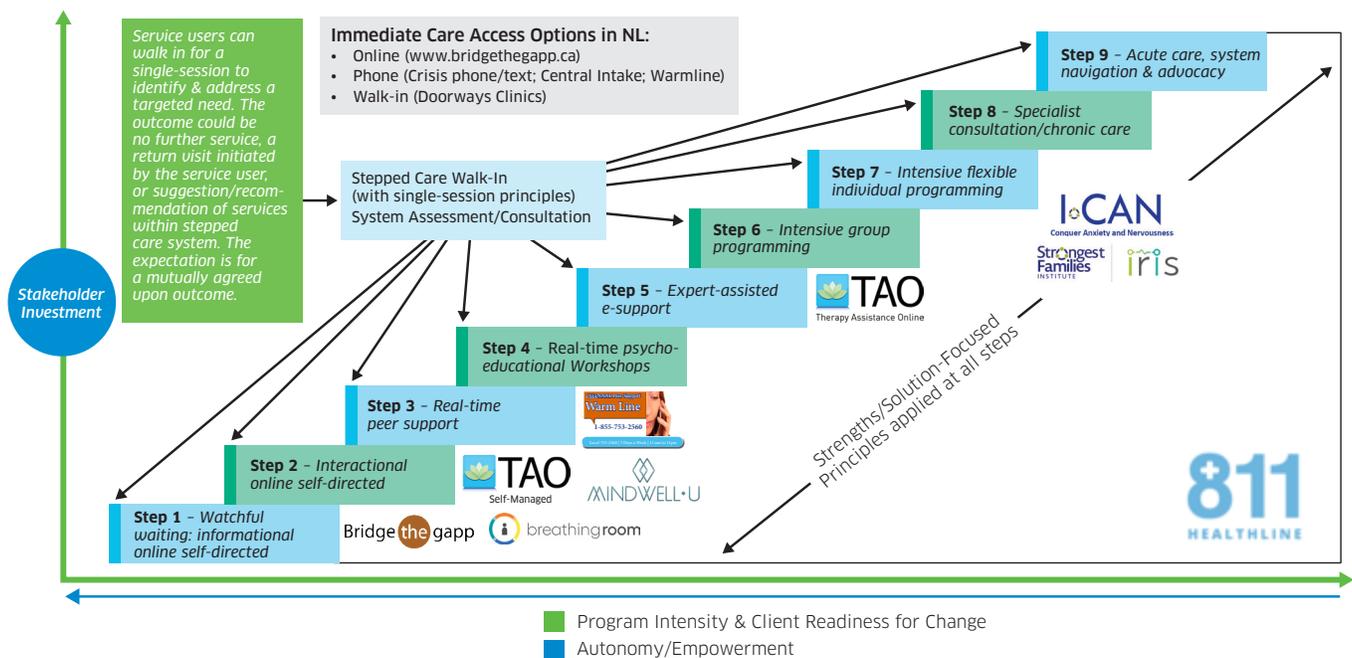


Offering an array of programs, such as the following, is essential for the success of Stepped Care 2.0:

- online self-help (Steps 1 and 2)
- peer support (Step 3)
- drop-in seminars and workshops (Step 4)
- blended in-person/online provider-assisted programs (Step 5)
- structured and unstructured counselling groups (Step 6)
- one-on-one sessions (Step 7)
- specialist care, e.g., psychiatric consults or residential treatment (Step 8)
- acute care and case management (Step 9)

Determining which program is most appropriate in each case depends on many factors, including the evidence on best practices, the client's mental health problem or illness, and the client's personality, preferences, and readiness to make changes or engage in complex therapeutic processes. Up to 80 per cent of those who present health concerns to a professional provider are not ready to take action or fully use the available interventions.[13] Stepped care acknowledges that by starting with the lowest, most effective intensity level. While such interventions often resolve the problem at hand, even when they don't they typically help the client prepare for and use the more intensive programs.

The *Towards Recovery* report organizes care strategies according to the severity and complexity of needs (see **Figure 1**). Yet, to account for other determinants of treatment selection, we have mapped this schema onto the Stepped Care 2.0 framework (see **Figure 2**). In addition, since community-wide prevention and health-promotion programs also align with the stepped care model, we have arranged programs according to stakeholder investment and program intensity (for both clinical and community settings). **Figure 3** shows all currently available e-mental health programs on the Stepped Care 2.0 framework.

**FIGURE 3.** E-MENTAL HEALTH PROGRAMMING IN THE CONTEXT OF STEPPED CARE 2.0
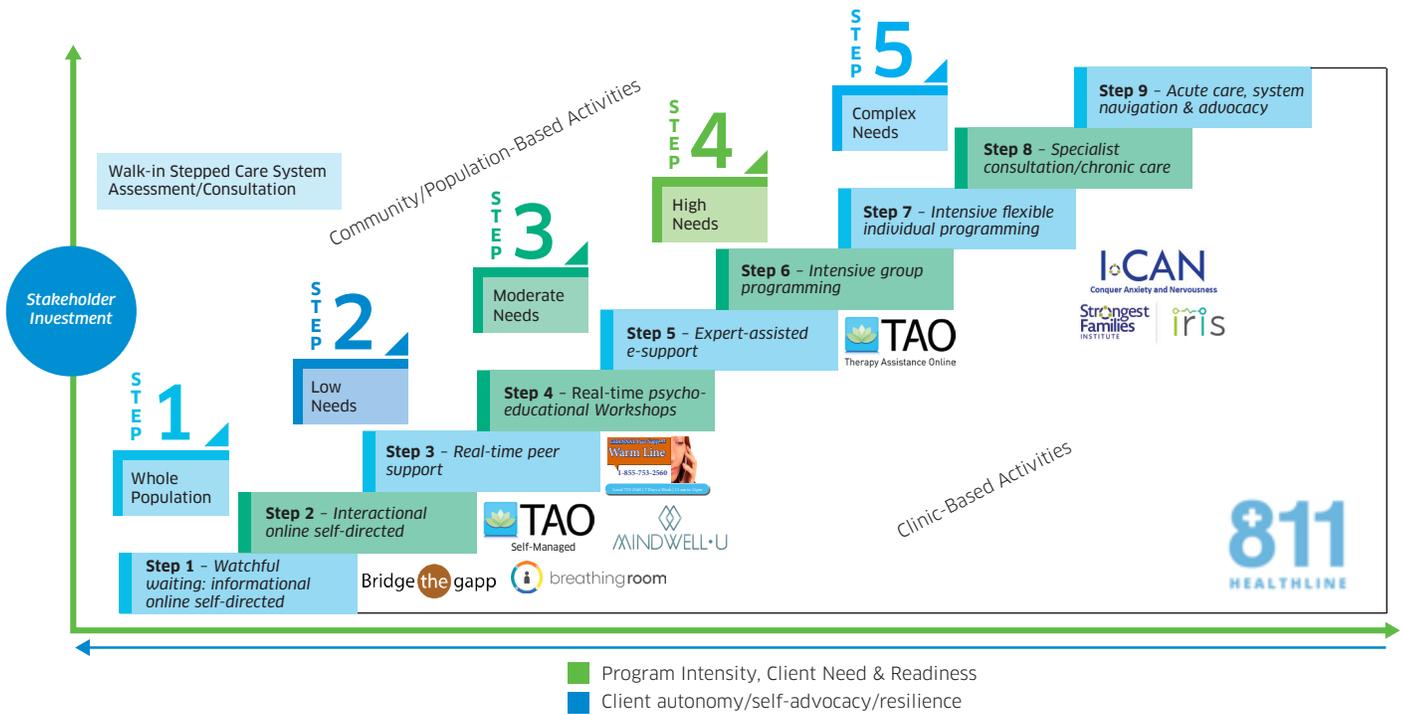


Stepped care is flexible and presumes that individuals need different supports at different times. Not only can clients who start with one intervention move to another as their needs change, providers are trained to collaborate to find the program(s) clients are most interested in and believe will work best. This approach aligns with research that shows client expectations and preferences to be significant predictors of mental health care outcomes.[14,15] Some clients do not want or need a "system of care." They may prefer counselling at a single session walk-in clinic, a walk-in session introducing the available stepped care options, or access to programs through the Bridge the gApp portal.

In addition, Stepped Care 2.0 applies recovery principles and offers clients a strengths-based approach,[16,17] facilitate a shift away from the risk paradigm* described in *Beyond the Risk Paradigm in Mental Health Policy and Practice*.[18] This paradigm has dominated our society and is responsible for directing most mental health resources to a small proportion of the population who, some believe (without much evidence), could put themselves or others at risk of harm.[19,20] Stepped Care 2.0 distributes care more impartially and systematically across the whole population to help reach the right balance on wellness promotion, illness prevention, low-intensity supports, recovery-oriented care, intensive treatment, and risk management.

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*   That is, the *idea* of risk as determined by social and cultural values, not the measurable, controllable, predictable, objective aspects of risk.

# Evidence for Stepped Care

Studies in the Netherlands and the U.K. have shown that stepped care improves client outcomes and access to mental health services without affecting costs.[21,22] One way that outcomes are improved is through continual client monitoring that allows clinicians and clients to adjust treatments based on current status. Research shows that feedback-informed treatment can improve outcomes by 30 per cent.[23,24] In fact, such practice-based evidence is now considered more important than evidence-based treatment methods. By administering the Behavioral Health Measure-20[25] (and associated monitoring scales) at each client visit, providers can share emerging outcome data (e.g., symptom resolution, therapeutic bond, well-being, functionality) and make collaborative treatment decisions right away. Not only is practice-based evidence helpful for maximizing outcomes, it also drives client motivation and responsibility for managing their own wellness.

Early outcomes[26] from implementation projects at three North American universities indicate that Stepped Care 2.0 increases provider caseload capacity by almost 20 per cent and session attendance by 12 per cent, while reducing the overall time providers spend with clients by two per cent. These results were achieved without the need for additional staffing resources, and client satisfaction levels remained high before and after implementation. An analysis of a mid-step intensity program, called Therapy Assistance Online (TAO), showed effect-size outcomes on par with traditional 50-minute psychotherapy sessions, using just one quarter of the provider time. Overall, stepped care provides rapid, same day, flexible access to wellness and mental health resources.

# Team Structure and Partnerships

Our demonstration project had three working groups: a core team, an evaluation team, and an advisory council (see **Figure 4**).* The core and evaluation teams met every two weeks, the advisory council twice each year. The core team managed all operational aspects, while the evaluation team offered guidance and expertise on methodology to assess the project's impact. The advisory council worked at arms-length and brought consumer, provider, and administrative perspectives from external groups that had experience in similar projects.

**FIGURE 4.** STEPPED CARE 2.0 AND E-MENTAL HEALTH PROJECT TEAM ORGANIZATION

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┌─────────────────────┐  ┌─────────────────────┐  ┌─────────────────────┐
│ Project Management &│  │ Principle           │  │ Project Lead – NL   │
│ Administration –    │  │ Investigator –      │  │ Provincial e-Mental │
│ MHCC –              │  │ Dr. Cornish & team, │  │ Health Manager –    │
│ Nicholas Watters    │  │ Memorial University │  │ Niki Legge          │
└─────────────────────┘  └─────────────────────┘  └─────────────────────┘
           ┌─────────────────────┐  ┌─────────────────────┐
           │ Central intake and  │  │ Committees: e-Mental │
           │ Community           │  │ Health Steering      │
           │ clinicians/primary  │  │ Committee, KE        │
           │ care within NL      │  │ Committee            │
           └─────────────────────┘  └─────────────────────┘
                    ┌─────────────────────┐
                    │ Demonstration       │
                    │ Project – Core Team │
                    └─────────────────────┘
      ┌─────────────────────┐  ┌─────────────────────┐
      │ Demonstration       │  │ Demonstration       │
      │ Project –           │  │ Project –           │
      │ Evaluation Team     │  │ Advisory Council    │
      └─────────────────────┘  └─────────────────────┘
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*  See Appendix B for team-member details.

The core and evaluation teams consisted of personnel from the MHCC and the N.L. government. In addition to funding the project, the MHCC provided direction and resources along with national and international connections. Government staff, who were with the project from the outset, included a Health and Community Services provincial e-mental health manager (as co-lead) and e-mental health managers in each of the four RHAs: Eastern, Central, Western, and Labrador-Grenfell. The MHCC also brought knowledge mobilization and implementation science expertise to the project's strategy, while N.L. regional managers had a vital role in its community-level execution.

Partnerships also evolved over the project's 18-month duration. N.L.'s four RHAs joined the three original partners* shortly after funding was announced. Later on, the chair of the Provincial Recovery Council for Mental Health and Addictions, became part of the core team – as did two board members from CHANNAL, the province's largest mental health consumer network. Next were the faculties of science and medicine at MUN and representatives from four e-mental health venders, who worked to adapt programming to the demographics and unique needs of each region. Finally, the Newfoundland and Labrador Centre for Health Information (NLCHI) supplied information on provincial wait times and advised on progress monitoring and the potential development of a stepped care/e-mental health portal/platform.

More recently, the Canadian Intergovernmental Conference Secretariat invited our lead investigator to introduce the project to the provincial and territorial ministers of health. Frayme, a global knowledge exchange network, also helped us extend our provider/client focus group work to youth wellness hubs in Ontario and British Columbia.† An additional $32,000 was allocated to our team to support this work.

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*  The MHCC, the N.L. government, and the MUN Student Wellness and Counselling Centre.
†  Frayme connects mental health, health, and social services for youth and young adults to accelerate the integration and implementation of youth care in Canada and around the world.

# Methodology
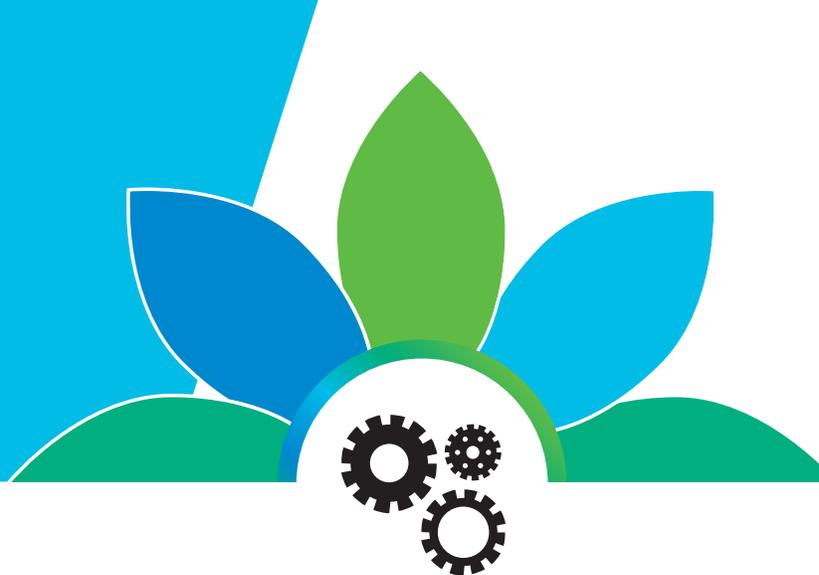
## Project Objectives

Mental health has become a priority in N.L. The province's bold new strategy, which involves collaboration by all three political parties, focuses on people's capacities. While certainly good news, such an investment in well-being has meant putting many ideas into action at the same time.

A central objective of our demonstration project was to find unifying principles that would allow these changes to work. In doing so, the teams set out to organize the new and established service offerings within the Stepped Care 2.0 model (including e-mental health) and explore the program changes and the extent to which changes at the 17 project sites and their communities were valued by staff, managers, clients, and the general public. Our hypothesis was that Stepped Care 2.0 could be the means to advance recovery principles, e-mental health innovation, and rapid access.

*The project sought to achieve the following objectives (detailed in Appendix D, Table D-1):*

1. Introduce innovative approaches and principles associated with Stepped Care 2.0 to assist with the implementation of Doorways single session programming and e-mental health tools launched across the province.

2. Assess stakeholder (provider, manager, consumer) readiness and satisfaction with Stepped Care 2.0 and e-mental health tools.

3. Engage stakeholders in discussions on how Stepped Care 2.0 and e-mental health might improve-mental health outcomes.

4. Use a continuous outcome monitoring system (i.e., the BHM-20) to report outcomes for clients served through Stepped Care 2.0, Doorways, and e-mental health tools.

5. Report all provincial client data collected by e-mental health vendors throughout the demonstration project.

6. Report available data on changes in service wait times that was collected by the province during the demonstration project.

*Our project evaluated five e-mental health interventions that were incorporated into Stepped Care 2.0:*

- BreathingRoom™: a program to help 13- to -24-year-olds learn new ways to manage symptoms, stress, anxiety, and depression
- Bridge the gApp: a resource to support mental wellness directed to adults and youth
- MindWell-U: mindfulness-based organizational development and training
- Strongest Families Institute: evidence-based services for mental health and other issues affecting children and families
- TAO Connect (Therapy Assistance Online): self-directed assistance or provider supported interventions

# Participants

The 17 sites in the project included 15 mental health and addiction clinics in the different regions and two integrated primary care clinics (providing health and social services) in the St. John's area (see **Figure 5**).

## Site description

The mental health and addiction clinics in various urban and rural communities are under RHA jurisdiction. The primary care clinics, both of which are integrated, were at MUN and in the community of Shea Heights.

## Provider description

Clinical staff at these sites included social workers, psychologists, counsellors, occupational and recreational therapists, nurses, and physicians. All staff members at the mental health and addiction clinics received training in Stepped Care 2.0, single session walk-in treatment, and recovery-oriented practice. Select volunteer staff members were trained and supported in providing TAO e-mental health programming. All staff members at the primary care sites were given Stepped Care 2.0 training but not organizational training and support in TAO,* though some were already using e-mental health programs.

**FIGURE 5.** PROJECT SITE LOCATIONS



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* Except one Shea Heights social worker.

## Client description

Clients receiving services at the mental health and addiction sites were adults (18 and older) with an identified mental health concern. MUN provides health and counselling services to all its students. Clients at Shea Heights were community members seeking primary health care, counselling, and/or social services (see **Figure 5** for project site locations; **Table 1** for site characteristics).

**TABLE 1.** PROJECT SITE CHARACTERISTICS

| Project Sites | Population Size* | Total Providers | TAO Trained** | |
| --- | --- | --- | --- | --- |
| | | | T1 | T2 |
| St. John's Metro | 205,955 | 43 | 17 | 35 |
|     Centre Town | | 15 | 5 | 13 |
|     West End/Conception Bay South | | 17 | 9 | 11 |
|     East End | | 11 | 2 | 11 |
|     Shea Heights Primary Care Clinic | | 11 | 1 | 1 |
| Bonavista | 3,452 | 4 | 2 | 4 |
| Clarenville | 6,291 | 9 | 2 | 7 |
| Harbour Grace | 2,995 | 11 | 3 | 9 |
| Grand Falls-Windsor | 14,170 | 11 | 1 | 11 |
| Lewisporte | 3,409 | 4 | 1 | 4 |
| Springdale | 2,971 | 3 | 1 | 3 |
| Corner Brook | 19,810 | 10 | 1 | 8 |
| Deer Lake | 5,249 | 2 | 1 | 2 |
| Stephenville | 6,623 | 12 | 2 | 11 |
| Curtis Memorial Hospital, St. Anthony | 2,258 | 6 | 2 | 11 |
| Labrador Health Centre, Goose Bay | 8,109 | 14 | 1 | 10 |
| Labrador West Health Centre | 8,622 | 15 | 2 | 15 |
| MUN Student Wellness and Counselling Centre | 2,744 | 20 | | N/A |
| **Totals** | **292,658** | **218** | **53** | **166** |

\* According to Canada's 2016 census.
\*\* The number of providers trained and implementing Therapy Assistance Online (TAO) increased over the implementation period, March 2018 (T1) and March 2019 (T2).

# Data Sources

*Data on provincial wait times, referrals, and program use were collected before and after the project. We analyzed the data from e-mental health program vendors – BreathingRoom™, Bridge the gApp, MindWell-U, Strongest Families Institute, and TAO Connect –\* who collect data on usage and (in some cases) satisfaction and outcomes. We also drew on four additional data sources:*

1. **A provider experience questionnaire.** This pre-training questionnaire was created to determine providers' baseline levels of comfort and confidence with stepped care principles and e-mental health programs, along with their readiness for practice change. It gathered demographic information and used reliable and valid instruments to measure providers' experiences of change. We adapted five of these instruments as follows:

   i.   Stages of Change for Stepped Care – adapted from Willey et al.,[27] a two-item scale that measures a provider's current stage of change for using stepped care in relation to medication adherence (precontemplation, contemplation, preparation, action, maintenance).

   ii.  Readiness to Engage in Stepped Care – adapted from the *Commitment to Change Questionnaire*, it measures a provider's affective (i.e., desire to change), continuance (perceived cost associated with change), and normative commitment (i.e., perceived obligation to change) regarding stepped care.

   iii. Self-Efficacy for Stepped Care – constructed in accordance with Bandura's "Guide for Constructing Self-Efficacy Scales,"[28] it measures a provider's confidence to enact stepped care principles in difficult situations or with difficult clients.

   iv.  Readiness for Implementing Stepped Care – adapted from Levesque et al.'s *Treatment Self-Regulation Questionnaire*,[29] it measures a provider's autonomous (i.e., internal) and controlled (i.e., external) motivation to incorporate stepped care principles into care. A calculated autonomy index measures the relative proportion of autonomous and controlled motivation.

   v.   Expectations to Enacting Stepped Care – adapted from Devilly and Borkovec's[30] *Treatment Expectations Credibility Questionnaire*, it measures a provider's belief in stepped care's credibility and whether using it is likely to bring benefits for clients.

   Providers were also asked to rate their familiarity with each available e-mental health program[†] and their comfort level with integrating such tools into practice.[‡]

   Finally, providers were asked to provide written responses to identify:

   - provider-related barriers
   - organization-related barriers
   - client-related barriers
   - benefits to implementing both stepped care and e-mental health programs.

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\*   See Project Objectives for brief descriptions of these programs.
†   Using a seven-point scale (1 being "not at all familiar," 7 "very familiar").
‡   Seven-point scale (1 "not at all comfortable," 7 "very comfortable").

2. **A client satisfaction questionnaire.** This questionnaire collected demographic information (regardless of whether clients were offered e-mental health) and measured comfort with technology, services accessed, and subjective ratings of satisfaction and perceived benefit. Two of the instruments were validated:

    i.  The *Client Satisfaction Questionnaire-8*,[31] which measures client satisfaction on services received.

    ii. The System Usability Scale,[32] which measures the usability of stepped care intervention options, as perceived by clients.

    Providers used convenience sampling to make sure clients did not feel coerced to participate, and they encouraged clients to complete the survey online or on paper. A link and QR code to access the online survey was also included as part of their written stepped care treatment plans. In addition, CHANNAL promoted the survey through social media postings.*

3. **Stakeholder experience focus group protocols.** Two versions were created:

    i.  **Community stakeholders (including mental health service clients)** – designed to encourage open descriptions of experiences with the mental health system without requiring disclosures that could compromise a person's right to privacy.

    Regional e-mental health managers, community contacts, and CHANNAL sought participation and organized groups. Two facilitators were present for each group, one to lead the discussion and one to take notes and record it on audio (with the group's permission). Participants were asked for their thoughts on mental health services in the province, including single session care, wait times, and e-mental health. Most were unfamiliar with stepped care, even though facilitators took the time to briefly describe it and ask for their thoughts a second time.

    ii. **Providers and managers** – designed to ask similar questions about participants' experience with mental health care programming, wait lists, and stepped care.

    A descriptive prompt on stepped care was not required for this group.

    Community stakeholder focus group sessions were held in six communities, representing the four N.L. RHAs: Eastern, Central, Western, and Labrador-Grenfell. Some groups were previously established mental health coalitions, and some were client groups CHANNAL had organized. Separate provider and manager focus groups were held via video conference. Written feedback was sought from providers and managers, including the regional e-mental health managers who were unable to attend the focus groups.

4. **A client monitoring system.** Although we intended to monitor outcomes of both in-person and e-mental health interventions using the Celest Health BHM-20 and related scales, implementation of the supporting technology was not possible due to the short time frame of the project. Vendor generated data (including BHM-20) as well as program usage data supplied by the N.L. government and CHANNAL will be reported.

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* Therefore, client satisfaction data is subject to self-selection bias and must be interpreted with this qualification.

# Implementation Procedure

*Stepped Care 2.0, which included e-mental health programming, recovery-oriented practice, single session therapy, and stepped care principles, was implemented and evaluated in five phases:*

1. Project planning and team development
2. Approvals, evaluation design, and training resource preparation
3. Baseline provider assessment and training
4. Launch of e-mental health tools, practice development, and support
5. Post-implementation data collection and preliminary analysis

**Phase 1: Project planning and team development (October-December 2017).** After MHCC funding was announced in September, project team members were recruited to create the core team, evaluation team, and advisory council. Members of the core team included a scientific lead, a health department and community services lead, a mental health consumer lead, a graduate student assistant, and a principal investigator. Their first task was to develop a project charter and a change management plan. An evaluation plan was also developed by core and evaluation team members.

**Phase 2: Approvals, evaluation design, and training resource preparation (January-March 2018).** The core team established partnerships with managers and stakeholders in the four RHAs. Approvals for project participation were obtained from the directors of each RHA. Training materials, including videos and an implementation manual, were also created.

**Phase 3: Baseline provider assessment and training (March-July 2018).** Phase 3 was the soft launch for the project. At this point, all e-mental health programs were operational and were made available to clinicians, clients, and the general public. Providers and managers from across the province attended a two-day workshop on recovery and the stepped care model in March. The training focused on integrating new learning on rapid access; solution-focused, narrative single session therapy; e-mental health programming; and strengths-based recovery values in the Stepped Care 2.0 context.

During the workshop, the project team discovered how needs and regional contexts varied across the province. As a result, on-site consultations and in-depth training sessions (tailored to different regions) were provided at nine clinics. Adapting the stepped care model to local capacities and needs involved a co-design process in which participants (1) identified existing resources to complement new services and e-mental health tools offered by the province, (2) used brainstorming to adjust the stepped care language and structure to fit with the local communities, and (3) adapted the Stepped Care Behavioural Prescription Form (see Appendix A) into a more user-friendly wellness plan, while removing jargon from the step descriptions.

Our training and resources included the following:

- recovery approach training sessions and conferences
- single session walk-in clinic training
- the clinical use of e-mental health programming (BreathingRoom™, MindWell-U, Strongest Families Institute, TAO)

- Stepped Care 2.0 on-site workshops (including adapted versions)
- the Stepped Care 2.0 E-Mental Health Training Manual
- the Stepped Care 2.0 community of practice (monthly webinars)
- the TAO community of practice (weekly webinars)
- the Stepped Care 2.0 web page

**Phase 4: Launch of e-mental health tools, practice development, and support (August-December 2018).** The Stepped Care 2.0 e-mental health program was officially launched on Sept. 1. Monthly community of practice webinars were hosted on topics of interest submitted by early adopters across North America. Wellness plans and a client satisfaction survey (based on client and provider input) were printed and launched to assist in planning and referrals. The focus group protocol was developed for release in early 2019. The province finished hiring regional e-mental health managers, who facilitated the implementation at regional clinics and took on roles as leads and coaches/champions for providers. A self-managed version of TAO was launched to ensure that people could access programming at Step 2 without provider involvement. Finally, the province accepted our proposal to fund attendance by primary care physicians at case conference meetings, which supported the shift to recovery-oriented practice and the integration of e-mental health, collaborative care, and stepped care at the two integrated primary care sites.

Additional feedback on the project implementation process was obtained during the launch period (November 2018) at a national quality improvement workshop in Toronto hosted by the MHCC. An interactive PowerPoint was developed as a repository for Stepped Care 2.0 and e-mental health content and implementation strategies. This resource functioned like a web page to allow easy access to a large amount of information. It also served as the foundation for the workshop (focused on our demonstration project), which offered opinions from seven multi-sector experts from across Canada on opportunities for improving its quality and scaling it up. The 50 stakeholders who participated in the workshop discussions informed the lessons learned on quality improvement. A separate day-long meeting for project team members and partners was hosted by the MHCC in St. John's, N.L., to exchange information about the project and prepare for drafting this final report.

**Phase 5: Post-implementation data collection and preliminary analysis.** A mixed-methods approach, including, quantitative questionnaires, qualitative interviews, and focus groups, was used to evaluate the implementation and outcomes associated with e-mental health and Stepped Care 2.0. The evaluation focused on:

- baseline and post-implementation provider experiences with the introduction of e-mental health programming and the stepped care approach, including the single session Doorways program for rapid access to care
- client experience and satisfaction with e-mental health programming and the stepped care approach, including Doorways
- government data on wait times and early outcomes
- data on peer support usage from CHANNAL
- vendor data on usage and early outcomes from e-mental health programming.

# Results

## Provider Questionnaire: Baseline Results

**Provider characteristics.** In total, 132 health-care providers completed baseline surveys. Among the respondents, 111 provided direct clinical care, 18 were managers, and 3 were administrators. We analyzed data only for the first group, 66 of whom worked in urban settings, 44 in rural, and 1 in both (see **Figure 6**).

**FIGURE 6.** PROVIDERS IN RURAL VERSUS URBAN SETTINGS



*Providers Rural/Urban*
- *Urban*
- *Rural*
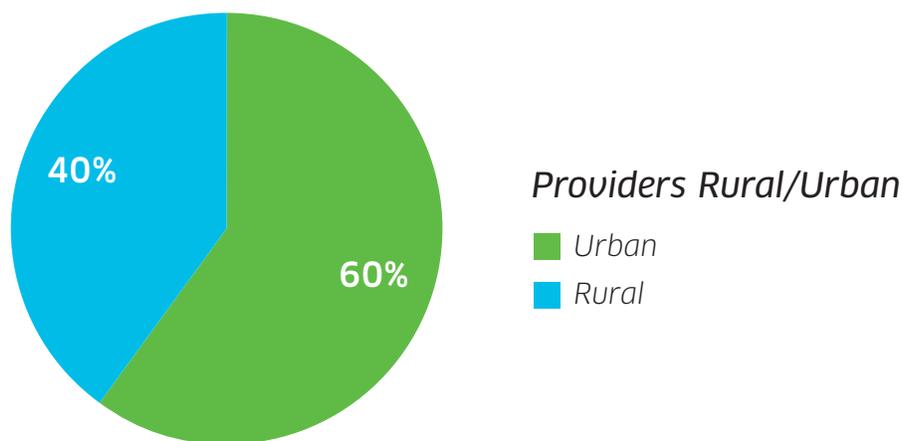
The professions represented (from most to least frequent) were: social work (55), psychology (24), nursing (16), medicine (7), occupational therapy (4), and other (5) (see **Figure 7**). On average, providers had 9.32* years in clinical practice.

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* Standard deviation (*SD*) was 8.36.

**FIGURE 7.** PROVIDERS BY PROFESSION



**Professions Represented**
- Social Work
- Psychology
- Nursing
- Medicine
- OT
- Other

Other **4%**
OT **4%**
Medicine **6%**
Nursing **14%**
Psychology **22%**
Social Work **50%**
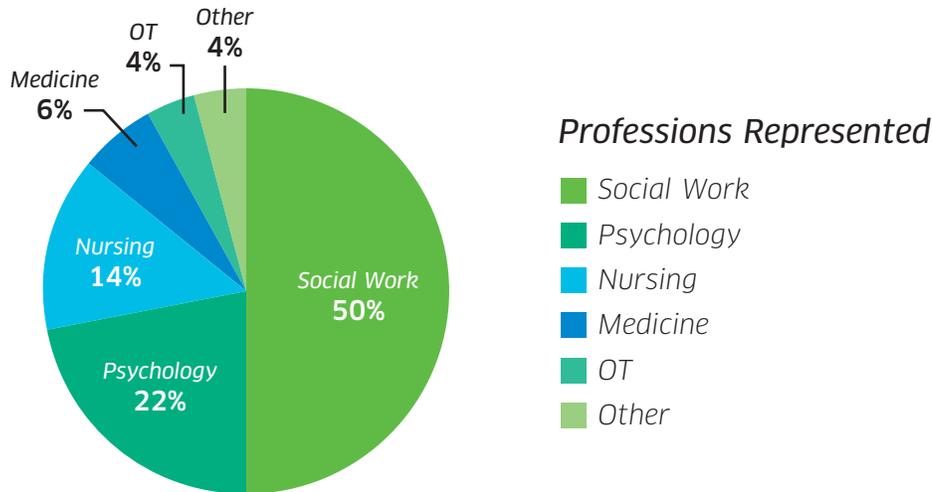
**Provider knowledge, beliefs, self-efficacy, readiness to change, motivation, and expectations.** On average, providers reported being "somewhat knowledgeable" about stepped care.* They rated their capacity (self-efficacy) to enact stepped care principles in difficult situations as "moderately certain."[†] On the stages of change questionnaire, most said they were either at the "action" (48) or "preparation" (44) stage, with only 17 at the "contemplation" (15) or "pre-contemplation" (2) stage (see **Figure 8**).

On average, providers reported having a high level of "affective commitment" to adopting stepped care principles.[‡] While neither agreeing nor disagreeing about the costs associated with adopting stepped care principles,[§] nor about whether adopting them was normative,** they rated their motivation to adopt stepped care (on the relative autonomy index) as more autonomous than controlled.[††] On average, providers believed that stepped care was credible[‡‡] and would be "somewhat successful."[§§]

**FIGURE 8.** PROVIDERS' STAGE OF READINESS FOR STEPPED CARE 2.0 PRIOR TO TRAINING



**Provider Readiness for Stepped Care**
- Action
- Preparation
- Contemplation
- PreContemplation

2%
14%
44%
40%

---
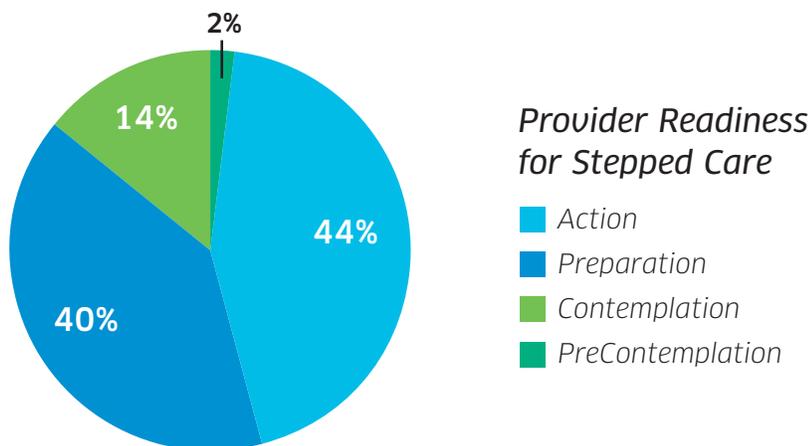
\* The mean (*M*) was 4.13, and the *SD* was 1.14 across eight items rated (using 1 "not at all knowledgeable," 7 "extremely knowledgeable").
† *M* = 6.24, *SD* = 1.61 across 10 items (0 "cannot do at all," 10 "highly certain can do").
‡ *M* = 6.0, *SD* = 1.02, seven items (1 "strongly disagree," 7 "strongly agree")
§ *M* = 3.65, *SD* = 1.29 across seven items (1 "strongly disagree," 7 "strongly agree")
** *M* = 4.31, *SD* = 0.53, seven items (1 "strongly disagree," 7 "strongly agree")
†† With a ratio of 1.59; *SD* = 1.46.
‡‡ *M* = 6.95, *SD* = 1.39, nine items (1 "not at all logical," 9 "very logical")
§§ *M* = 5.78, *SD* = 1.64, nine items (1 "not at all successful," 9 "very successful")

**Provider comfort with e-mental health programming.** Providers' familiarity with e-mental health programming options was evaluated using a seven-point scale,* as was their comfort level on integrating such programming into their practice.†

**Differences between rural and urban providers.** To evaluate differences between rural and urban providers we used independent sample t-tests, which showed that their knowledge did not differ on:

- stages of change for stepped care

- readiness to engage in stepped care

- self-efficacy for stepped care

- readiness for implementing stepped care

- expectations to enacting stepped care.‡

Except with TAO, rural providers reported greater familiarity and comfort with integrating e-mental health tools into their practice (detailed in Appendix D, **Table D-3**).

**Perceived barriers and benefits.** Qualitative data from provider surveys, written feedback, and site-visit field notes went through a grounded theory analysis using Atlas.ti software. **Figure 9** lists the themes that the open-ended questions revealed about expected barriers and benefits to e-mental health and stepped care. As this figure shows, most providers were realistic and optimistic about their potential: many expected improved access to mental health supports and found the programming empowering for clients. Providers also said to expect some resistance from certain providers and to manage expectations for change with sensitivity.

**FIGURE 9.** PROVIDER COMMENTS TO OPEN-ENDED SURVEY QUESTIONS ON BARRIERS AND BENEFITS TO STEPPED CARE 2.0 AND E-MENTAL HEALTH

| Themes for open-ended questions | Question item # code was applied to | Total # of references |
|---|---|---|
| Access to care will be improved | 1 | 27 |
| Better model, improved outcomes, more efficient | 1 | 14 |
| Change process is very difficult in context of high workload | 3 | 27 |
| Empowering, autonomous, more ownership, responsible, resilient | 1 | 18 |
| Fear of doing harm without enough assessment | 3 | 4 |
| Interprofessional team dysfunction and dynamics may be a barrier | 2 | 9 |
| Lack of understanding of SC model, SC tools, professional roles is a barrier | 4 | 32 |
| Low literacy & SES of clients are barriers | 1 | 4 |
| Managing expectations and pace of change is needed to combat fears and myths | 4 | 58 |
| More infrastructure and resources are needed | 2 | 10 |
| Most providers see few or no barriers to SC and e-mental health | 3 | 33 |

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* (1 "not at all familiar," 7 "very familiar")
† (1 "not at all comfortable," 7 "very comfortable"); Table D-2 in Appendix D presents the mean and standard deviation for these two evaluations in relation to specific e-mental health tools.
‡ All $p$ values were greater than .23.

| Themes for open-ended questions | Question item # code was applied to | Total # of references |
|---|---|---|
| Preferred practice & theory of some providers may be incompatible with SC and e-mental health | 3 | 4 |
| Professional specialist identity appears to be threatened by some providers | 3 | 14 |
| Quality of client experience is a worry | 2 | 8 |
| SC and e-mental health allow for tailored treatment, flexible, more options, client centric, right care, right time | 2 | 30 |
| SC promises to address client's readiness for change | 1 | 4 |
| Some resistance by providers, managers and clients to this major change is inevitable | 3 | 43 |
| Some unrevised policies, procedures and structures will impede implementation | 3 | 10 |
| Tech problems, client discomfort with tech, inadequate support is a concern | 3 | 14 |
| Unclear how SC and e-mental health will work for clients with complex needs | 3 | 7 |

**Co-design workshops and consultation.** Stepped Care 2.0 training emphasizes co-design and adaptation at the community level. Field notes* captured providers' insights on implementation. For example, three of the six themes that emerged in our grounded theory analysis (see **Figure 10**), suggest that provider and client engagement with lower step levels may be stronger in rural sites. With scarcer resources in these sites, efforts to address needs are often more innovative. Also, providers commonly thought that, so far, Doorways single session clinics were doing more to reduce wait times and address client needs across the province than e-mental health programs.

**Other observations were more abstract. In consultations with providers and managers, we noted early on that parts of the Towards Recovery strategy were being implemented separately, without clear articulation of how they could fit together systematically. For example, experts who provided single session training did not necessarily connect it to the recovery principles or e-mental health training providers were receiving. Providers were also not seeing connections to their existing skill sets. At times, this piecemeal approach was overwhelming and confusing. In some cases, providers expressed concern that their original training and practices were being unfairly criticized. There was also confusion and concern about their roles in a reformed system. Based on such observations, providers made the following two suggestions:**

1. **Use a team-building approach to professional development in stepped care and e-mental health to alleviate confusion and help integrate their different components with existing programs.**

2. **Have communications experts develop a coordinated marketing and messaging campaign to shift expectations toward recovery principles and help providers and clients make use of new resources.**

Practical solutions also emerged outside these themes. For example, providers in one community suggested splitting Step 3's "peer support" and "psycho-educational workshops" so that "psycho-educational workshops" became part of Step 4. Providers in another community categorized a much-loved "knit and talk" program as a Step 3 peer support resource.

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\* Recorded during MHCC site visits and consultations.

**FIGURE 10.** CLINIC VISIT AND CONSULTATION OBSERVATIONS.
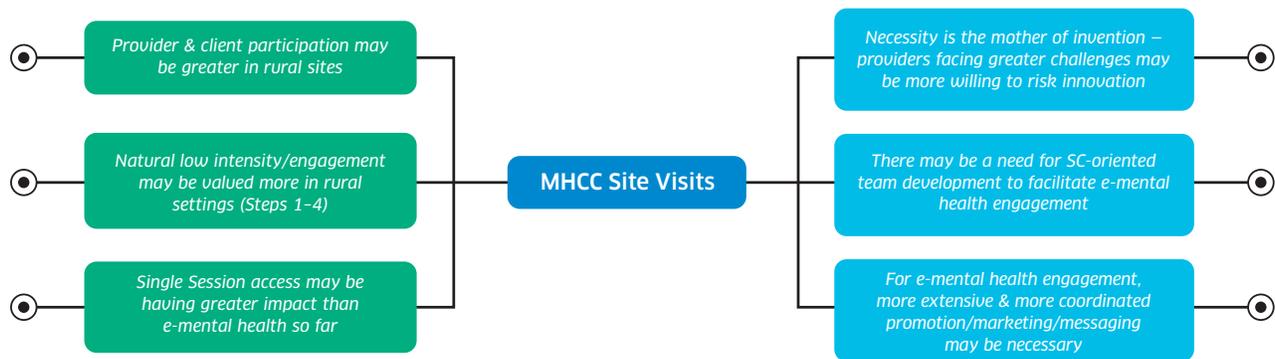


# Provider Questionnaire: Post-Implementation Results

In total, 32 health-care providers (including provider-managers) completed post-implementation surveys. This low response rate (compared to the baseline) can be attributed to a number of factors, including job changes, workload demands, length of the survey, and a lack of dedicated time to complete it. The strongest factor is likely how the survey was administered. Baseline surveys were completed during the in-person training workshops where providers were allocated dedicated time, while post-implementation surveys were emailed. It is important to note that, given the small number of respondents, this is a self-selecting sample with a high risk of bias (i.e., we cannot state with any confidence that results from these individuals could be generalized to the provider base we originally surveyed).

All respondents reported receiving training in stepped care.* Paired sample *t*-tests were performed to evaluate change from before the implementation (pre-test) to after the implementation (post-test), and our analyses for providers and managers were performed separately.

For providers, significant increases were observed in:

- knowledge of stepped care
- self-efficacy in enacting stepped care
- stage of change to enact stepped care
- familiarity with TAO, Strongest Families and Bridge the gApp
- comfort using Bridge the gApp.†

For managers, significant increases were observed in:

- knowledge of stepped care
- stage of change to enact stepped care
- familiarity/comfort with Bridge the gApp.‡

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*    Reported provider hours of training: $M$ = 7.53 ($SD$ = 10.3); managers: $M$ = 7.67 ($SD$ = 6.65).
†    See Appendix D, Table D-4 for details.
‡    See Appendix D, Table D-5 for details.

*"I'm using TAO. Some clients like it and some don't. The biggest difference with the walk-ins, single session, and e-mental health is that I have more time and flexibility. Clients come in or book a time with me when they want service. They are not automatically booked in week after week, making for a packed schedule and lots of no-shows. This opens up my schedule and I'm amazed that I can fit in training time and even community and collaboration groups, which I couldn't do before the program changes."*

– Provider

Qualitative data from open-ended questions on the provider survey were analyzed using a constant comparison,** grounded theory method. Data were entered into Atlas.ti and coded by one coder. Through constant comparison, the initial 53 codes were merged and reduced to 46. Codes and concepts were then related through a network analysis (see **Figure 11**), where one emerged as a central concept: "stakeholders are embracing stepped care and e-mental health, but more resources are needed for full implementation." This concept was grounded in seven quotations and linked (a measure of density) to all 52 remaining codes. Four codes emerged as second-level concepts – client-centricity, program effectiveness, enhanced provider practices, and too much change – and eight codes as third-level concepts: right time and rapid access, right program, efficiency, evolved skills, lack of stepping resources, lack of messaging, high demand, and inadequate training and tech support. The remaining codes were organized at a level below these concepts.

*"The suite of e-mental health services available to the public has provided options to individuals for accessing services. Some individuals have accessed online services as their first option, while others have accessed online services as an adjunct to traditional services. There was some resistance to the online model, but it is developing with individuals now requesting to use online services such as TAO. There is a recognition that online services may not be for everyone (from a personal preference perspective), but giving the option and helping people become literate in these services is a positive."*

– Provider manager

Results indicated that respondents understood the concept of Stepped Care 2.0 and in general felt positively about stepped care and e-mental health. Specifically, providers believed that the stepped care model is client-centric while promoting client autonomy, empowerment, and responsibility. They also saw it as evidence-based and effective. While some believed it helped their practices evolve, many thought more support and training, and additional investment in resources, including greater technology support and infrastructure, were needed. Some myths about the stepped care model and e-mental health were expressed, which could be addressed by additional training and greater attention to change management and implementation science.

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** An analysis method that develops its findings by testing each code with the data, continuously revising codes and re-testing to ensure emerging themes directly reflect collected data.

*"Doorways has been a great support to patients in my practice for their mental health. The key features are rapid access, compassionate and professional response, and the ability to take the 30-60 minutes with a patient [that are] needed (when I am already stretched to the max for time as a clinician). I am hitting around 25 consecutive positive patient experiences with Doorways so far, and I distribute the care frequently with a strong endorsement. While access to specialized psychiatry care remains a challenge, the Doorways service is the most practical and timely, non-ER, face-to face, publicly funded mental health service I have seen in my two decades of medical practice here in N.L. It's been needed for many years and it is now a key part of my mental health toolkit for my patients."*

– Paul Jackman, general practice physician and clinical chief of primary care at Eastern Health

**FIGURE 11.** POST-PROVIDER QUALITATIVE SURVEY ITEM THEMES
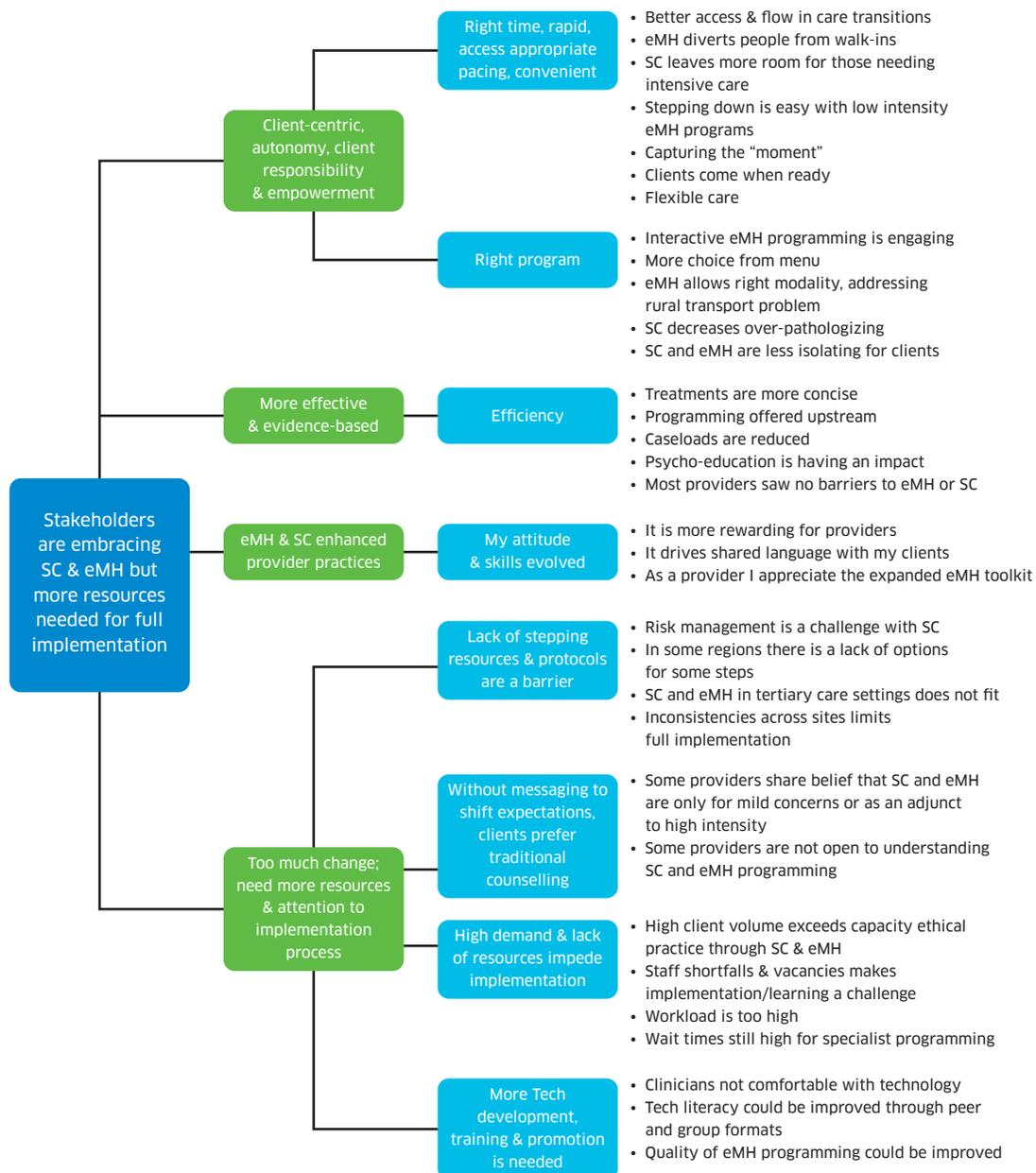
# Client Satisfaction Survey Results

Client satisfaction data were limited to a snapshot of experiences in the last three months of the project. This data was used to continuously improve the client experience and help monitor fidelity to the model and programming offered. In a small, non-representative sample, 212 client surveys were completed between Jan. 1 and March 25, 2019. During that time, most of these clients indicated they had not been offered e-mental health tools when accessing mental health programming (see **Figure 12**). Among the programs offered and tried, Bridge the gApp* ranked first (see **Figures 12 and 13**), while BreathingRoom™† was first among programs with interactive content. TAO (therapist-assisted version) was the next most frequently proposed, while Strongest Families (Step 5) and MindWell-U (Steps 2 and 3) were put forward less often.

The survey also showed what services clients accessed in addition to e-mental health programs. **Figure 14** lists these according to all nine steps of Stepped Care 2.0 (not just the e-mental health tools). While 59 per cent of the usage was for high-intensity services (Steps 6-10), considerable engagement (41 per cent) occurred at lower intensities (Steps 1-5). About half said they accessed Step 7 counselling. The second most common was interactional, online programing at Step 2. As well, around 50 per cent said they accessed e-mental health programming (at Steps 1, 2, and 5). The Doorways single session program was also used by many clients, even though it is not considered one of the steps in the current project.

**FIGURE 12.** CLIENT SATISFACTION SURVEY: PERCENTAGE OF CLIENTS OFFERED E-MENTAL HEALTH PROGRAMS (*N* = 231)

### Clients offered e-mental health programs



| Program | Value |
|---|---|
| Strongest Families – Step 5 | 3 |
| TAO Therapist Assisted – Step 5 | 8.3 |
| Mindwell – Steps 2–3 | 3 |
| TAO Self-Managed – Step 2 | 7 |
| Breathing Room – Step 2 | 10 |
| Bridge the gApp – Steps 0–1 | 25.2 |
| No eMH offered | 35.2 |
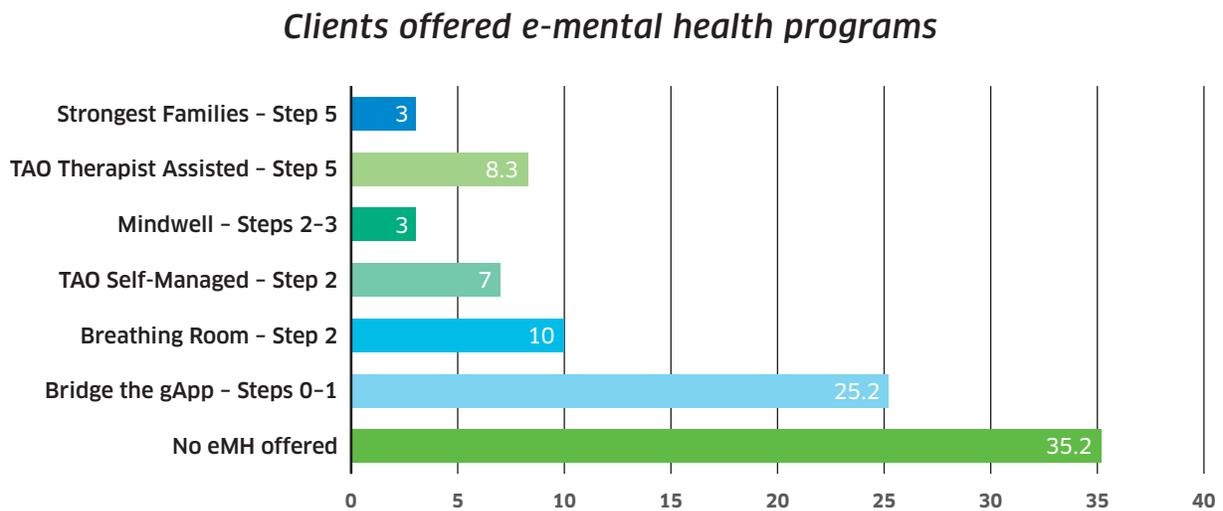
\* A Step 1 mental health literacy and service directory site.
† A Step 2 self-managed program.

**FIGURE 13.** CLIENT SATISFACTION SURVEY: PERCENTAGE OF CLIENTS WHO TRIED E-MENTAL HEALTH PROGRAMS (*N* = 75)

### E-mental health programs tried by clients
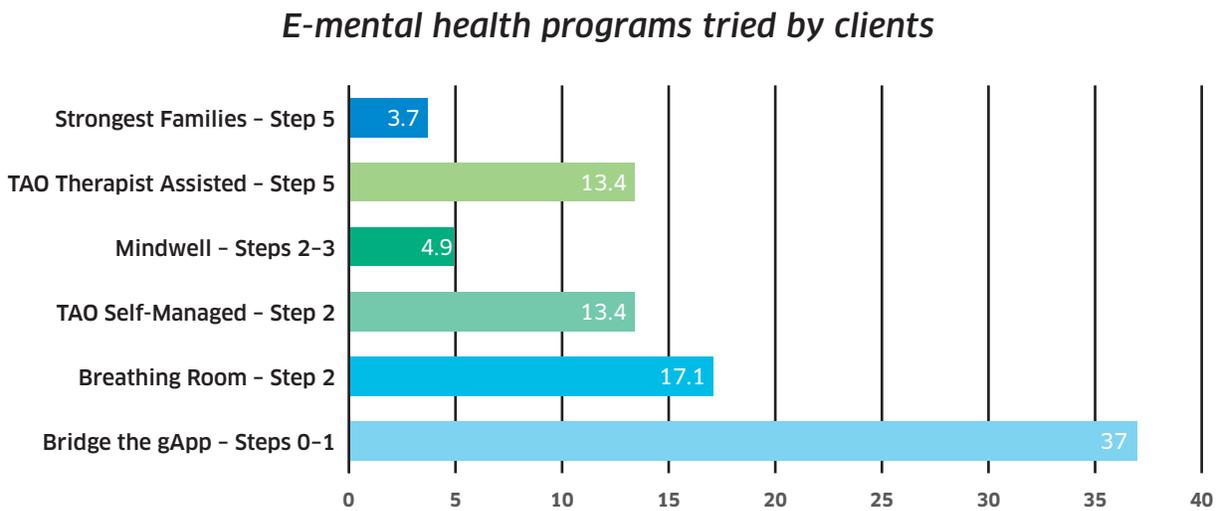


**FIGURE 14.** CLIENT SATISFACTION SURVEY: NUMBER OF CLIENTS USING SERVICES AT STEPS 1-9 (*N* = 231)

### Services Used According to SC2.0
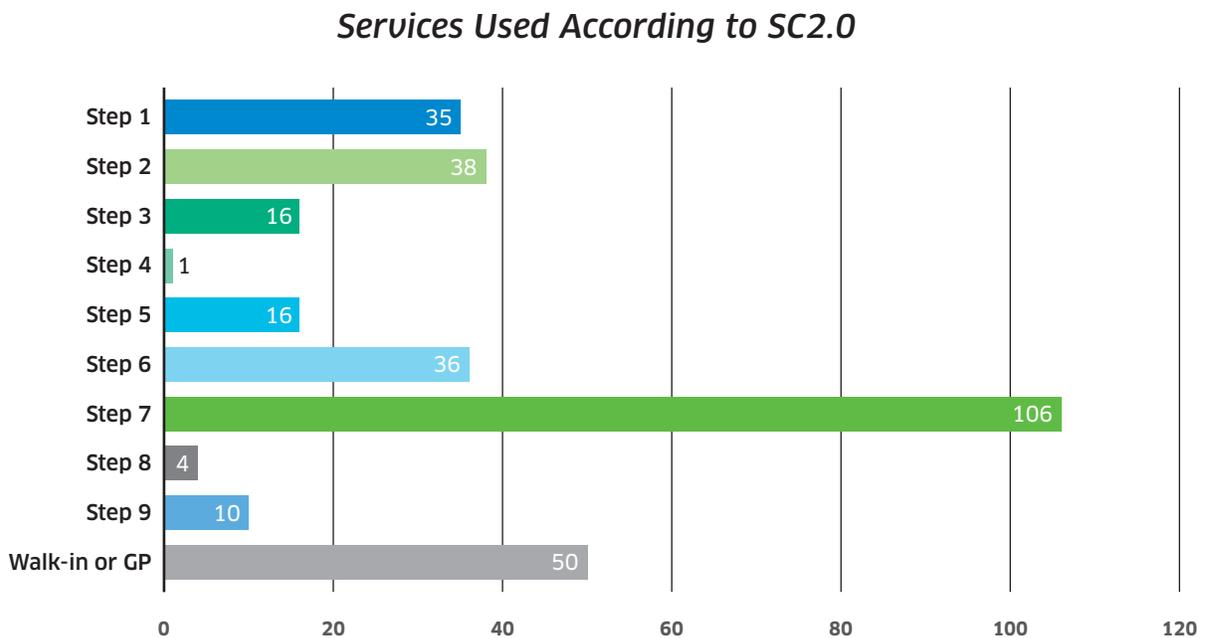
Most clients surveyed rated the quality of the tools "good" or "excellent," whereas 15 per cent rated them "poor" (see **Figure 15**).

**FIGURE 15.** CLIENT SATISFACTION SURVEY: RATED QUALITY OF E-MENTAL HEALTH PROGRAMS (*N* = 33)



Rated Quality EMH Tools

- Excellent
- Good
- Fair
- Poor
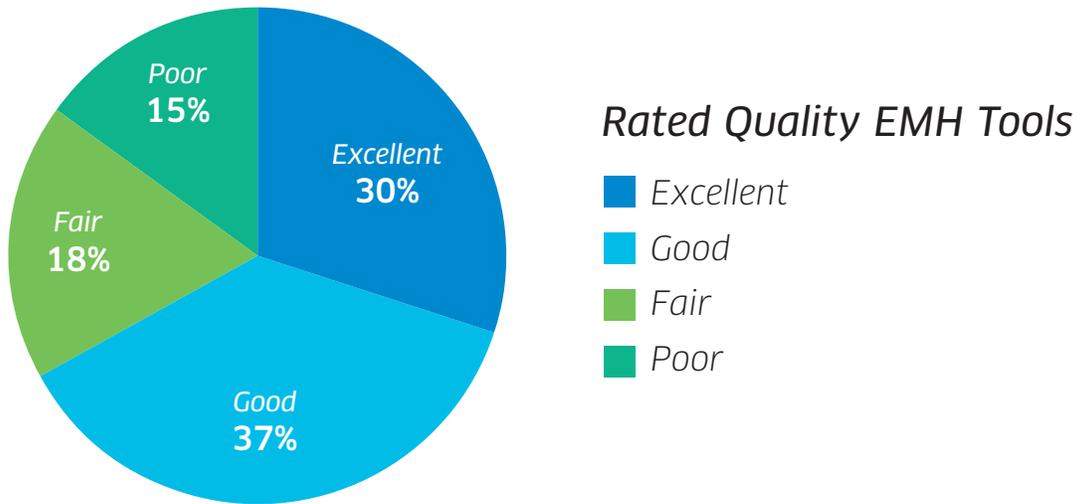
Most of those surveyed (79 per cent) said the e-mental health tools met at least some of their needs, while 21 per cent said they met none (see **Figure 16**).

**FIGURE 16.** CLIENT SATISFACTION SURVEY: NEEDS MET BY E-MENTAL HEALTH TOOLS (*N* = 34)



EMH Tools Met My Needs

- *Almost all of my needs have been met*
- *Most of my needs have been met*
- *A few of my needs have been met*
- *None of my needs have been met*
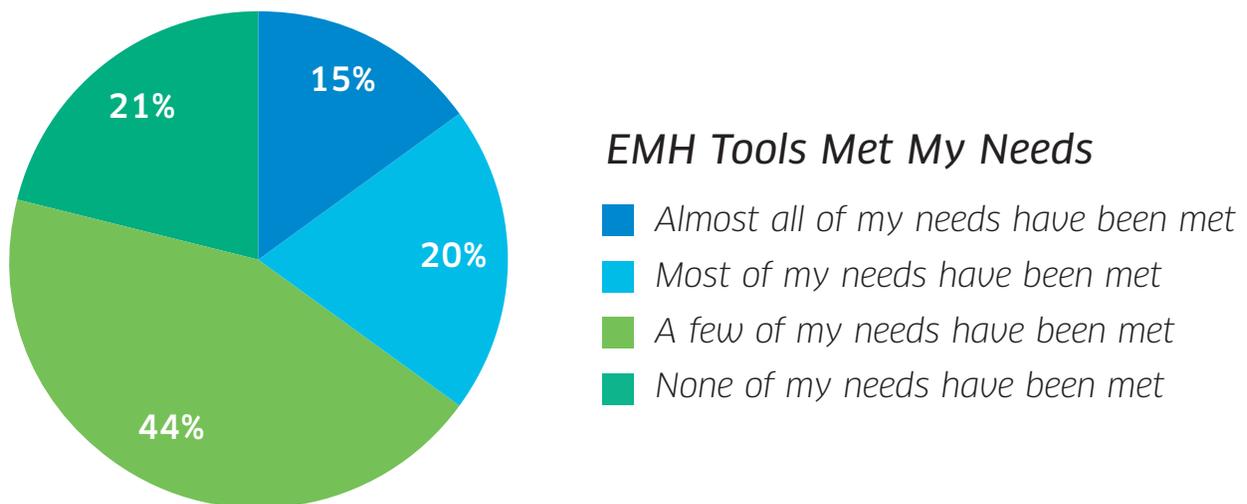
About 62 per cent of clients surveyed said the e-mental health tools helped them deal with their problems (see **Figure 17**). While around 38 per cent said they didn't really help, no one said e-mental health tools made things worse.

**FIGURE 17.** CLIENT SATISFACTION SURVEY: DEALING WITH PROBLEMS THROUGH E-MENTAL HEALTH PROGRAMS ($N$ = 34)



### EMH Tools Helped Me Deal With My Problems

- ■ *Yes, it helped a great deal*
- ■ *Yes, it helped somewhat*
- ■ *No, it really didn't help*
- ■ *No, it seemed to make things worse*
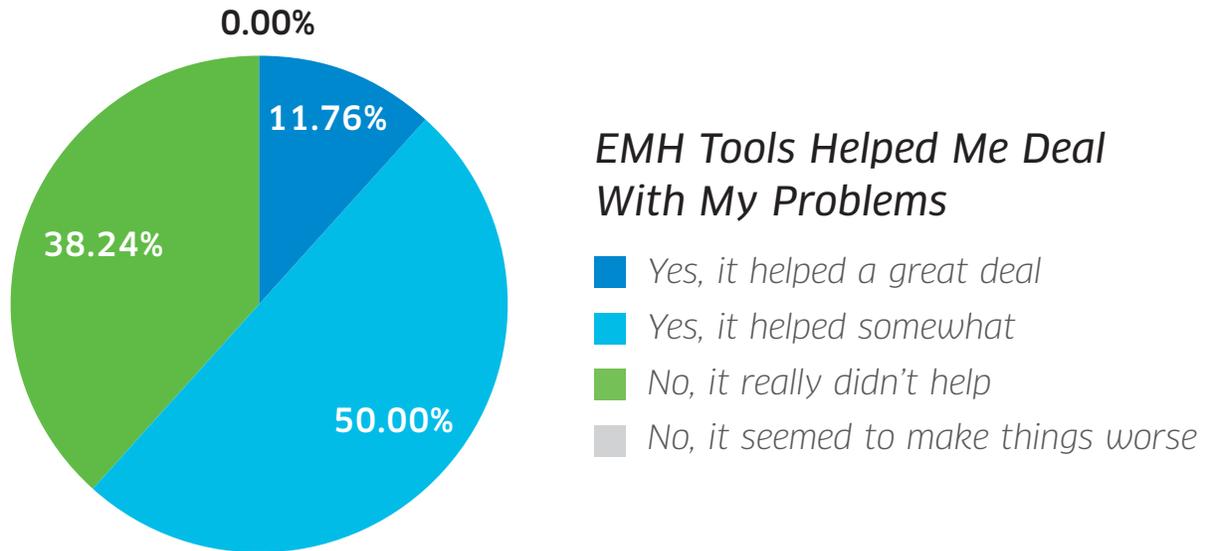
## Community Stakeholder and Provider Focus Group Results

The community stakeholder groups were held across six community sites: Clarenville (14 participants), St. John's (13), Grand Falls-Windsor (12), St. Anthony (7), Corner Brook (5), and Goose Bay (5). The format was the same for each, with one implementation project member leading the discussion and another as note keeper. We used five prompts:

- What do you think about getting access to health care and decreasing wait times?
- What do you think about walk-in counselling like Doorways?
- What do you think about online-mental health programs and services?
- What do you think about a stepped care approach for mental health care?
- What do you think about the way changes to mental health care are being done or implemented?

*Mental health care reform is "something that needs action right now; feeling like suicide, suicide attempts, and suicide ideation has increased."*

– Person with lived experience

When time permitted, we also asked two supplemental questions:

- If we were to continue changes in this direction, what should be next?
- If we were to reverse some changes, what would you suggest being reversed?

*Before stepped care, "it was like waiting to get access to a backhoe when all you need is a shovel."*

– Person with lived experience

The two provider groups were held in four community clinic settings or in about three GlobalMeet video conferences. Three providers and four managers also provided written responses for themselves and/or their provider teams in lieu of attending focus groups. Here, we used six prompts:

- Tell us about your experiences with improving access and decreasing wait times.
- Tell us about your experiences with online-mental health programming.
- Tell us about your experiences with stepped care principles and practices.
- Tell us about your experience with the implementation process for e-mental health and stepped care.
- What was the most successful?
- What has been least successful?

*"I have used TAO even with younger clients (like 12-13ish) to build skills (the Mindfulness Library as an example). I love having access to these."*

– Provider A

Once again, the focus group data were analyzed using the constant comparison, grounded theory method. Data were entered into Atlas.ti and coded by one coder. Initially, 62 codes were generated and, through constant comparison, were reduced to 13 concepts that were related through a network analysis.

The central theme that emerged, which addressed participants' mixed perceptions and attitudes, was "not enough implementation science." While showing enthusiasm about the stepped care model and e-mental health tools, they believed these could be improved by greater attention to implementation processes, especially technology enhancement, marketing, and more training on programs and interprofessional collaboration. These mixed feelings are visible in the comment of Provider B: although the model provides rapid access, matching is perhaps not yet in line with client preferences.

*"One client described it like going to the fast lane at Walmart to see the next available cashier. She was mostly wanting a psychiatrist assessment and was given many other services while she was waiting. Fast access, but maybe not what you want."*

– Provider B

## Wait Times and Program Access Results

Service wait times. Between 2017 and 2018, wait times in N.L. for mental health and addictions services were reduced by 68 per cent. This reduction is likely due to a combination of factors, such as:

- implementing the *Towards Recovery* action plan

- assigning a team of specialists to reduce wait times

- introducing changes such as single session interventions in Doorways walk-in clinics and e-mental health services

- instilling quality improvement processes and practices in the RHAs

- implementing this demonstration project.

**Doorways data results.** With over 4,400 visits at more than 50 Doorways walk-in clinics, wait times across the province have been reduced to the point where some communities are reporting no wait times.

## E-Mental Health Program Results (Steps 1-5)

**Bridge the gApp usage data (Step 1).** Since April 1, 2018, the Bridge the gApp website attracted 28,000 users, in 43,000 sessions (averaging 2.5 minutes), and had a bounce rate[†] of 47 per cent. About 61 per cent of its users were 18-to-34-year-olds. Most user IP addresses were located in Canada, with others from the U.S., Australia, and Asia.

**BreathingRoom™ usage data (Step 2).** From April to September 2018, BreathingRoom™ data showed they had had 331 active users, 82 per cent of whom were female, 16 per cent male, and two per cent gender-diverse. The program was used mainly by adults, which is somewhat surprising given that the target audience is youth, age 12 to 25. Users mostly learned of the program through referrals by health-care professionals; however, 48 per cent did so outside the formal health system.

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[†]   Percentage of users who leave a website after viewing one page.

**MindWell-U usage data (Steps 2 and 3).** According to its internal tracking, the MindWell-U 30-Day Mindfulness Challenge in N.L. had 2,055 participants since its launch in June 2016. In that time, these people have completed 34,519 Take 5 meditations (totaling 1,726 hours). MindWell-U app monitoring showed high participant-satisfaction levels (98 per cent were satisfied with 98 per cent using its program tools daily). A total of 41 per cent had completed more than half of the 30-day program, with 22 per cent completing all of it. Over 90 per cent noticed improvements in managing stress or conflict, communication, and mental and physical health.

**CHANNAL peer program results (Step 3).** Usage of all CHANNAL peer programming increased over the course of the demonstration project. During this time, usage for the Warm Line, the most commonly used program, increased by 29 per cent (from 10,280 calls in 2017-18 to 13,212 calls in 2018-19). Peer support offered at Doorways single session clinics more than doubled (from 545 to 1,204). **Table 2** shows average monthly contacts.

**TABLE 2.** AVERAGE MONTHLY CONTACTS FOR CHANNAL PROGRAMS BEFORE AND DURING THE PROJECT

| Year | Warm Line | Peer and Family Groups | One on One | Doorways |
|---|---|---|---|---|
| Pre-project: March 1/17-April 30/18 | 857 | 299 | 55 | 45 |
| During project: March 1/18-April 30/19 | 1,101 | 312 | 63 | 100 |

**TAO usage data (Step 5).** By September 2018, the demonstration project was fully operational. Evaluations of the effectiveness of TAO online therapies occurred between August 2018 and January 2019 (the last month data were available). TAO data collected between January and June 2018 were used as a measure of early implementation. All analyses were performed using IBM's SPSS statistics 25 software.

Between January 2018 and January 2019, 330 individuals completed the BHM-20 at least once (see **Table 3**). There was a sharp decline in the number individuals (41) who completed monitoring sessions six or more times.

**TABLE 3.** TAO CONTINUOUS OUTCOME MONITORING JANUARY 2018-JANUARY 2019

| Number of Times BHM-20 Completed | |
|---|---|
| 1 (Day 0) | 330 |
| 2 (Day 11) | 192 |
| 3 (Day 24) | 130 |
| 4 (Day 37) | 89 |
| 5 (Day 48) | 62 |
| 6+ (Day 57+) | 41 |

*Effect of TAO on mental health outcomes*

We conducted further analyses on the 192 individuals who completed the BHM-20 at least twice, using a repeated measures analysis of variance (ANOVA) of TAO on four outcomes: (1) global mental health, (2) well-being, (3) life function, and (4) symptomatology.[‡]

## GLOBAL MENTAL HEALTH

Time was a significant factor for global mental health.[§] Participant scores on the global mental health subscale of the BHM-20 improved gradually between January 2018 and January 2019 (see **Figure 18**).

**FIGURE 18.** TAO MENTAL HEALTH OUTCOMES: CHANGE IN GLOBAL MENTAL HEALTH OVER TIME**
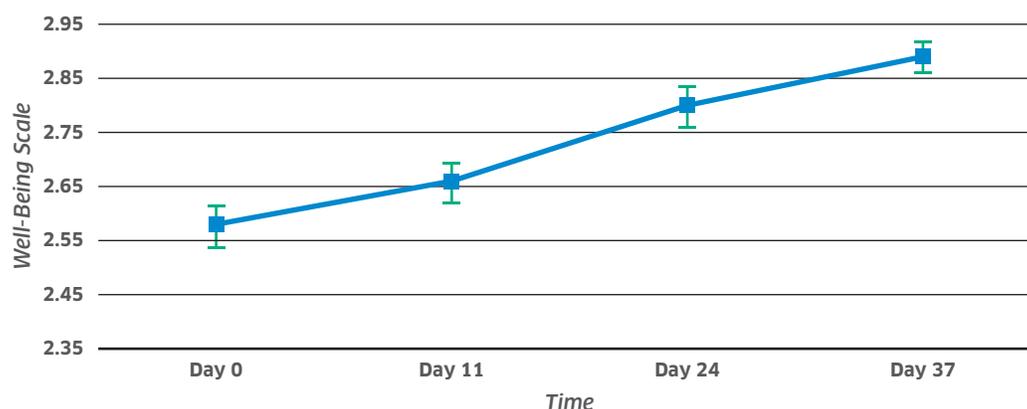


## WELL-BEING

Time was a significant factor for well-being[‡‡]. Participant scores on the well-being subscale of the BHM-20 improved gradually between January 2018 and January 2019 (see **Figure 19**).

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[‡]    To minimize potential bias due to attrition, missing data was imputed using an expectation maximization with 50 iterations.

[§]    $F$ (F-distribution) (3, 189) = 21.34, $SE$ = 0.11, p < .01, ($\eta p^2$ (partial eta squared) = .25 with a significant linear contrast, $F$(1, 191) = 62.30, $SE$ = 0.16, $p$ < .01, $\eta p^2$ = .25.

[**]   $N$ = 192. Error bars represent standard error of the mean.

[††]   $F$(3, 189) = 19.20, $SE$ = 0.23, $p$ < .01, $\eta p^2$ = .23 with a significant linear contrast, $F$(1, 191) = 57.21, $SE$ = 0.32, $p$ < .01, $\eta p^2$ = .23.

**FIGURE 19.** TAO MENTAL HEALTH OUTCOMES: CHANGE IN WELL-BEING***
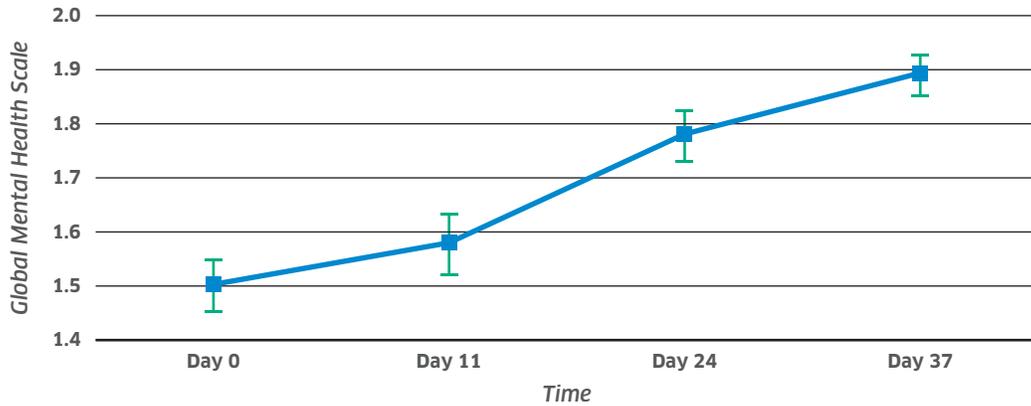


## LIFE FUNCTIONING

Time was a significant factor for life functioning.§§ Participant scores on the life functioning subscale of the BHM-20 improved gradually between January 2018 and January 2019 (see **Figure 20**).

**FIGURE 20.** TAO MENTAL HEALTH OUTCOMES: CHANGE IN LIFE FUNCTIONING***
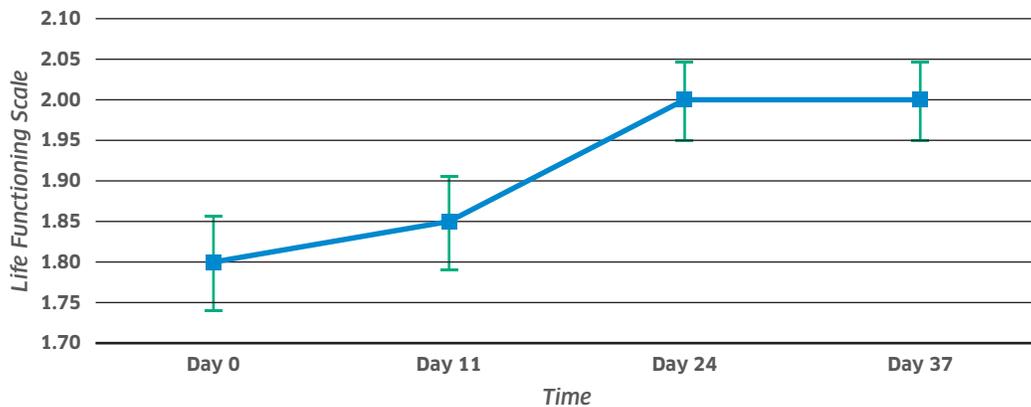


## SYMPTOMATOLOGY

Time was a significant factor for symptomatology.† Results indicated that symptomatology improved gradually between January 2018 and January 2019 (see **Figure 21**).

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*** $N$ = 192. Error bars represent standard error of the mean.

§§ $F(3, 189) = 6.44$, $SE = 0.22$, $p < .01$, $\eta p^2 = .09$ with a significant linear contrast, $F(1, 191) = 7.22$, $SE = 0.38$, $p < .01$, $\eta p^2 = .09$.

† $F(3, 189) = 20.04$, $SE = 0.11$, $p < .01$, $\eta p^2 = .24$ with a significant linear contrast, $F(1, 191) = 58.32$, $SE = 0.16$, $p < .01$, $\eta p^2 = .23$.

**FIGURE 21.** TAO MENTAL HEALTH OUTCOMES: CHANGE IN WELL-BEING[‡‡‡]
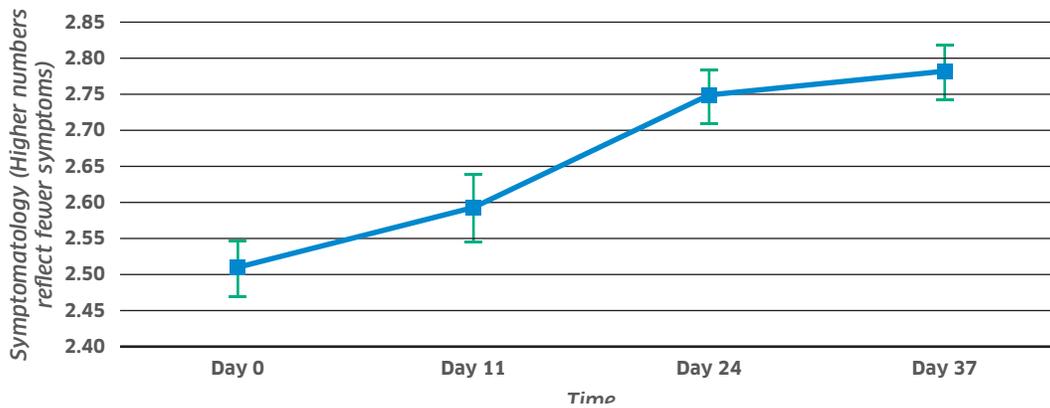


*Number of individuals achieving a reliable change in symptoms*

A second method we used to evaluate the effect of mental health services was through a reliable change index (RCI). An RCI shows the cut-off score at which measurement changes over time would be statistically significant.[§§§]

Change in subscales of the BHM-20 were calculated by subtracting the individual's score during their first administration from their score during the fourth administration. The RCI was calculated for improvement (i.e., those whose scores exceeded the RCI in a positive direction) and deterioration (i.e., a negative direction). The number of individual's obtaining a reliable change following the use of TAO over a 37-day mean (four administrations of the BHM-20) are presented in **Table 4**.

**TABLE 4.** NUMBER OF INDIVIDUALS OBTAINING A RELIABLE CHANGE ON THE BHM-20

| Variable | January 2018–June 2019 | | |
|---|---|---|---|
| | **Improved** | **No Change** | **Deteriorated** |
| Global mental health | 32 (17%) | 158 (82%) | 2 (1%) |
| Well-being | 55 (29%) | 129 (67%) | 8 (8%) |
| Life functioning | 50 (26%) | 121 (63%) | 21 (11%) |
| Symptomatology | 63 (33%) | 113 (59%) | 16 (8%) |

**Strongest Families Institute usage and outcomes (Step 5).** The Strongest Families Institute collected detailed outcome data for users of their anxiety treatment program. Since April 1, 2018, 469 clients began treatment, with 335 completing all six sessions. The institute uses the Brief Child and Family Phone Interview (BCFPI) and a five-point Likert questionnaire to assess outcomes through ratings by parents. According to Strongest Families, 250 clients had their issues resolved (BCFPI), 11 showed some improvement, and six showed none. Ratings by 423 parents were also supportive:

- very good improvement  177
- good improvement      160
- a little improvement    33
- some improvement       50
- no improvement         3

---

[‡‡‡]  *N* = 192. Error bars represent standard error of the mean.
[§§§]  RCIs for the BHM-20 scales are presented in Appendix D, Table D-6.

# Discussion and Preliminary Recommendations
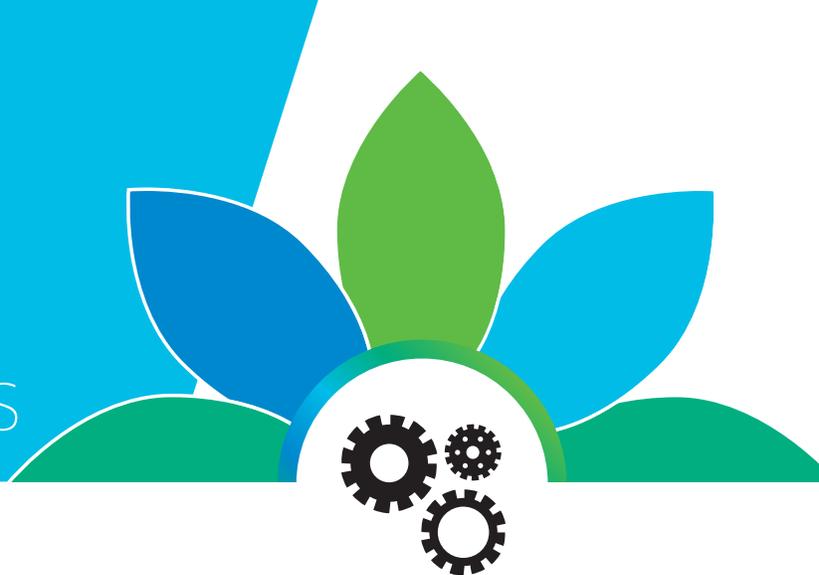
Through our demonstration project we introduced Stepped Care 2.0 to Newfoundland and Labrador. This new model of care sought to organize and enhance a number of programs launched concurrently in the province, including the *Towards Recovery* strategy, single session clinics, and a suite of e-mental health programs.

Preliminary results suggest that Stepped Care 2.0 has helped engage stakeholders in their efforts to improve access and reduce wait times. These results also indicate the growing use and generally positive experiences of e-mental health programming. When system wait time data is taken together with stakeholder input (from providers, managers, clients and community members) and program vendor usage data, e-mental health programming using a stepped care model to organize and deliver programming was positively received. Client satisfaction with e-mental health was high, and provider satisfaction with stepped care and e-mental health was even higher. Provider readiness and enthusiasm for the model and for e-mental health were also greater at the end than at the start of the project.

At this stage, however, these results must be considered preliminary. The response rate was low, and the implementation period was much shorter (less than two years) than implementation science experts recommend. With a transformational project of this magnitude, more time and care are needed for full implementation. Several change management and contextual challenges must be navigated to address the gaps and barriers the project uncovered. There are also several limitations to the data in this report:

- The client questionnaire data are not representative of the N.L. population.
- The sample size was small and had mostly female respondents with education levels that are higher than the norm.
- The low response rate in the post-implementation provider data suggests that they are not representative of the provider population.
- The client outcome data reported for the e-mental health programming were collected over a short period without longer-term followup.
- The small sample size of some programs limited the generalizability of their results.

Having a longer implementation, evaluation interval, and a wider representation in the populations sampled would allow for more meaningful results. Therefore, rather than providing a thorough evaluation of e-mental health or Stepped Care 2.0, the results of this project are best understood as setting the foundation for a more rigorous evaluation.

The demonstration project served as an initial implementation study for integrating e-mental health programming within a stepped care model based on recovery principles. The number of trained providers for e-mental health programming increased at all sites during the project period. Overall, the provider experience of e-mental health and stepped care was positive, with only a few barriers or challenges identified. In our baseline results, we did find a significant difference between rural and urban providers, with rural providers reporting greater acceptance and use of e-mental health and stepped care. Our client questionnaire results showed that many providers did not initially offer e-mental health services. Yet, when they began doing so, clients tried them and received them positively. About half the client respondents tried one of the e-mental health tools or services, with most rating it "good" or "excellent" while stating that it helped them with their problem. While clients commonly used high-intensity in-person counselling, the survey and program usage data showed that single session walk-in (i.e., Doorways) and lower intensity programming (e.g., e-mental health and peer support) were highly used as well. Such wide-ranging use suggests that the Stepped Care 2.0 model was successful in promoting and expanding the options to suit varied needs and the readiness of the population.

A substantial reduction in wait times also occurred during the project period. Service wait lists in all regions were reduced and, in some areas, eliminated entirely. While this reduction follows extensive work within government departments and working groups to redesign services, our demonstration project likely contributed to wait-time reductions by reinforcing and supporting this change. The spread of e-mental health programming and Doorways single session, walk-in services (a key component of Stepped Care 2.0), provided a systematic, recovery-principled approach that providers could use to organize care.

Although it is not possible to definitively conclude that e-mental health programming or stepped care resulted in improved mental health outcomes, provincial wait time data suggests that people with mental health concerns did receive rapid access to services, and that the promotion of low intensity and accessible programming helped address some-mental health concerns. For example, well-being improved for those using TAO, and effect sizes were comparable to those typically associated with high-intensity, more expensive face-to-face counselling.

The demonstration project provided many lessons from the field based on anecdotal evidence, working group discussions, and qualitative analysis. Not surprisingly, much of what we learned reflects gaps related to processes, resources, and stakeholders that are likely to facilitate system innovation. Examples of these gaps include the following:

**Technology infrastructure development.** The success of stepped care largely depends on outcome monitoring and integration within the larger health-care system. Very few mental health-care professionals use an outcome monitoring program at all, let alone on a regular basis. Stepped care is meant to rectify that problem. For the purposes of our project, monitoring would have required all sites to have technology in place to continually measure and record outcomes. The ability to integrate such information into client medical records would have brought greater interprofessional collaboration and continuity to stepped care treatment plans.

We had planned to use the Celest Health outcome monitoring system – which includes symptom severity measures and scales for risk, wellness, therapeutic alliance, and change readiness – to be administered at each treatment session or clinical interaction. Initially, we allocated 12 months to implement the system, but it later became clear, based on several factors, that adjustments were needed.**** These included:

- having to outfit clinics with infrastructure such as reliable wireless internet, iPads, and support staff
- verifying compliance with privacy regulations
- ensuring compatibility with electronic record systems.

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**** Due to this delay, BMH-20 outcomes are not reported here; however, these are being reported by the e mental health service vendors.

Although we liaised with representatives from NLCHI and Canada Health Infoway to try to implement the infrastructure more quickly, we suggest that such organizations and RHA IT managers be included as full implementation team members at the outset.

We also recommend that a platform be developed to house all e-mental health tools, including a monitoring tool. This could involve expanding the Bridge the gApp portal, which currently provides information only on mental health resources and access to Step 2 self-managed programs. This expansion could assist clients and (when relevant) enable monitoring of a program's impact to inform decisions on the choice of steps. Ideally, this platform would interface with the provincial health record and offer separate dashboard views for clients, providers, and administrators.

**Full participation of medical professionals.** No primary care physicians or psychiatrists were involved in designing the Stepped Care 2.0 model, developing the walk-in clinic, or selecting e-mental health technology – nor were medical professionals represented on the project team. Such decisions were originally made to help us manage the scope of the transformation. But along the way we discovered that a small group of family physicians was already moving ahead on their own version of stepped care with an e-mental health component. We also realized that the Stepped Care 2.0 rapid access principle (less emphasis on up-front assessment) was also compatible with family medicine and primary health care delivery. In the end, the decision not to include medical professionals led to missed improvement opportunities. We therefore recommend that broader professional participation be considered at the outset of the design and implementation process.

**Messaging on the new model.** Many stakeholders, service users, community advocates, and providers were curious and wanted more information on the new programming and how to access it. They were eager for change and excited by its principles and objectives as well as by its rapid access process, e-mental health tools, and the capacity to move more easily through levels and varieties of care. Yet, building a system of care involves integrating a wide range of programs and processes into a more elegant and intuitive structure. So, we believe earlier involvement by experts in communications, graphic design, and marketing would facilitate the process of articulating the program's complexity in a more digestible format. Initially, this might have accelerated the implementation among professionals and, eventually, set the foundation for public messaging to encourage appropriate and efficient access to programming.

**More coordinated professional development.** In keeping with the principle of readiness, provider involvement in this aspect of the project was voluntary. Initially, the number who attended training was relatively low, but by the end attendance had more than doubled – with especially high growth for TAO. While this organic expansion made it difficult to collect meaningful pre- and post-training data, it is a measure of success for the model and the training strategy. That said, we recommend that the future implementation strategy take a more structured approach to orienting volunteer providers, so that those who join after the project begins can more easily catch up. Also, the training curriculum could be more formally integrated within the stepped care framework. Doing so would help providers see how the new approaches can complement traditional practices and enable providers to more easily recognize how the components fit together.

# Enablers for the implementation of Stepped Care 2.0.

There has been considerable interest nationally and internationally in the N.L. Stepped Care 2.0 e-mental health demonstration project. The interest began in 2014 with a presentation of its MUN version at an international conference in Chicago. Since then, training workshops have been delivered to nearly 150 organizations in North America and beyond (see Appendix C). As with N.L. Stepped Care 2.0, training at these sites focused on co-design and adaptations to local circumstances and existing resources. Among them were sites in Ontario and Alberta, where mental health services are more decentralized and have far less direction from provincial governments. In consulting with organizations outside N.L., we discovered several unique factors that enabled the province to become a leader in this work. These enablers include:

1.  The political will to transform the mental health and addictions system with e-mental health technologies and stepped care models as support tools.

2.  The all-party committee *Towards Recovery* report and action plan, which specifically recommend the advancement of stepped care and e-mental health tools.

3.  Dedicated staff to support the project, training, and change management at provincial and regional levels:

    - project manager

    - provincial lead for e-mental health

    - regional e-mental health managers

    - dedicated trainers (e.g., stepped care, single session).

4.  Stepped care tools (e.g., the fidelity checklist, the stepped care wellness plan, e-mental health practice and implementation manuals, training videos, case-note templates, stepped care model design templates).

5.  The provincial commitment to recovery principles (away from deficit approaches to assessment and treatment) by integrating strengths-based assessment and programming at all step levels.

6.  The strong engagement of people with lived experience through local community agencies and the Recovery Council. Engaging these stakeholders is key for implementing the model and providing peer support programming.

**In addition, based on our discussions with mental health decision makers who attended the national quality improvement workshop in Toronto in November 2018, we offer the following recommendations as important or essential to the successful implementation of stepped care:**

- having a dedicated project coordinator along with administrative staff support

- using a dedicated Stepped Care 2.0 trainer to deliver the large volume of new content in stages

- ensuring the careful application of implementation science and change management planning

- establishing single session walk-in clinics with in-depth training and ongoing support, supervision, and consultation from a single session expert

- employing dedicated, regional e-mental health managers as change management coaches

- developing evidence-based, locally adapted and designed practice tools to increase fidelity to the stepped care model (e.g., the fidelity checklist, the stepped care wellness plan, e-mental health practice and implementation manuals, training videos, case-note templates, stepped care model design templates)

- obtaining a provincial commitment to mental health recovery principles that move beyond the dominant societal risk paradigm

- shifting toward recovery principles (away from deficit approaches to assessment and treatment) by integrating strengths-based assessment and programming at all step levels

- involving persons with lived experience in the model design and the delivery of peer programming at all step levels (co-design)

# Conclusion

This report describes an implementation project to integrate Stepped Care 2.0 with e-mental health tools and rapid access walk-in clinics, in the context of a provincial mental health strategy founded on recovery principles. The qualitative and quantitative data collected from internal and external stakeholders suggest high receptivity to this approach. Current results suggest that Stepped Care 2.0 helped efforts to improve access by offering an evidence-based model and programming options that both clients and providers received positively.

This report offers recommendations for further investigation and evaluation of Stepped Care 2.0, based on these preliminary observations and data. Its purpose is to provide a foundation to scale up the model and encourage more rigorous scientific scrutiny that can guide Stepped Care 2.0 implementation in other jurisdictions across Canada.

The project team has since secured $1.2 million in funding from the Canadian Institutes of Health Research (CIHR) to develop a technology platform and evaluate its potential for significantly improving mental health care and access in N.L. and Nova Scotia. The lessons learned in this project have set a firm foundation for launching this pragmatic CIHR trial research project.

Stepped Care 2.0 shows promise as a framework for integrating e-mental health interventions, recovery principles, and single session rapid access counselling on a provincial scale. In conjunction with strong political will and leadership, the lessons learned from this project – including our list of enablers for Stepped Care 2.0 implementation – can be adopted to successfully apply this approach in other provinces and territories to improve access to mental health care for all.

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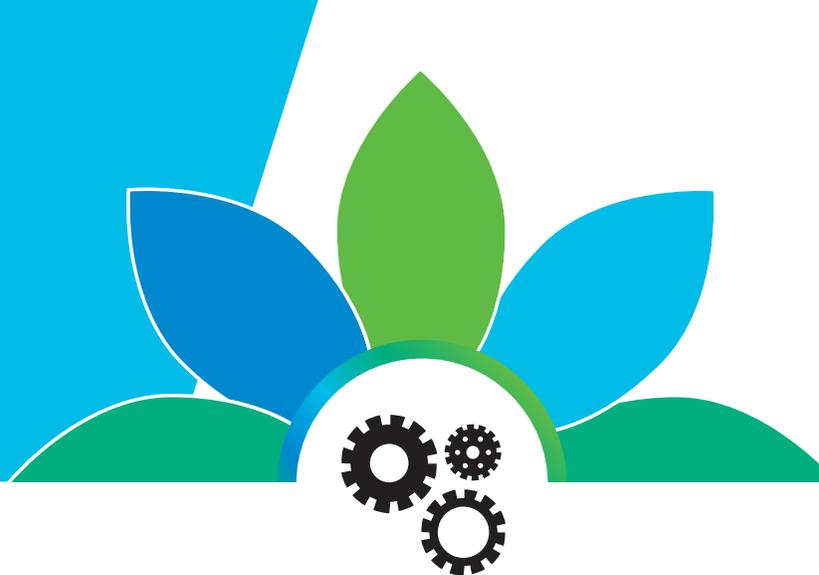
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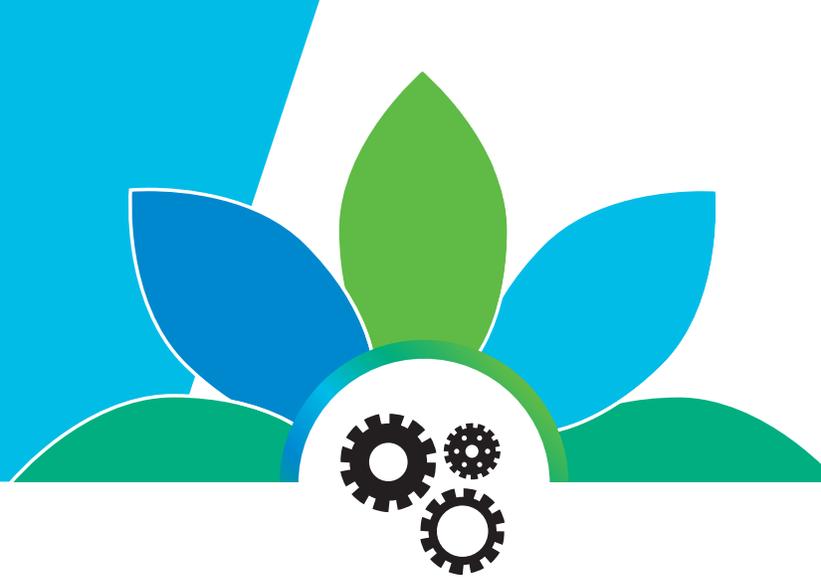
## Behavioural Prescription Treatment Plan Form

**Stepped Care Wellness Plan** (carbon copied)

Client Name: _____

Date: _____

0. No further service required at this time          _____

1. Online: information only                          _____

2. Online: activities                                _____

3. Peer support                                      _____

4. In-person information session or workshop         _____

5. Online counselling                                _____

6. In-person group counselling                       _____

7. In-person individual counselling                  _____

8. Specialist care                                   _____

9. Emergency or crisis services                      _____

10. Other                                            _____

Provider name: _____

Contact information: _____

Please tell us about your experience with our program by completing our (anonymous) Client Satisfaction Survey. A paper version is available at the front desk.

*Thank you*

# Appendix B

## Project Teams

| Project Core Team | | | |
|---|---|---|---|
| **Member Name** | **Role** | **Organization** | **Responsibilities** |
| Peter Cornish | E-mental health/ stepped care implementation and research project lead | MUN SWCC | Program development and change management |
| Niki Legge | Provincial government co-lead | Gov. N.L. | Provincial implementation |
| Paula Corcoran Jacobs | Lived experience lead | CHANNAL | Client representation and engagement |
| AnnMarie Churchill | Coordinator | MUN SWCC | Change and project management |
| Lisa Fleet | Evaluation Lead | MUN medicine | Program evaluator, ethics approval |
| Sarah Pegrum | Clinical Lead | Eastern Health clinical | Clinical engagement and training |
| Josh Rash | Fidelity lead | MUN psychology | Fidelity of implementation and outcome monitoring |
| MaryAnn Notarianni; changed to Nicholas Watters | MHCC lead: Direction and oversight | MHCC | Provide overall project direction and oversight to the core team/ project |
| Galin Kora | MHCC evaluation lead | MHCC | Provide direction on the evaluation from the MHCC perspective |
| Heather Hair | Single session lead | MUN social work | Provide direction on single session set-up and design in SC project |
| Danielle Impey | Project support | MHCC | Provide support |
| Bonita Varga | Project Support | MHCC | Provide support |

| Project Core Team | | | |
|---|---|---|---|
| **Member Name** | **Role** | **Organization** | **Responsibilities** |
| Brad Yetman | Research assistant | MUN SWCC | Research support |
| Mike Herrel | Lived experience rep. | CHANNAL | Client representation and engagement |
| Alicia Raimundo | Lived experience rep. | Foundry | Client representation and engagement |
| Meghan Churchill | E-mental health manager | Eastern Health | E-mental health manager |
| Byron Boyd | E-mental health manager | Central Health | E-mental health manager |
| Tracey Wells | E-mental health manager | Western Health | E-mental health manager |
| Victoria Kearney | E-mental health manager | Labrador-Grenfell Health | E-mental health manager |

| Evaluation Team | | | |
|---|---|---|---|
| **Member Name** | **Role** | **Organization** | **Responsibilities** |
| Peter Cornish | E-mental health/stepped care implementation and research project lead | MUN SWCC | Program development and change management |
| Niki Legge | Provincial government co-lead | Gov. N.L. | Provincial implementation |
| Paula Corcoran Jacobs | Lived experience lead | CHANNAL | Client representation and engagement |
| AnnMarie Churchill | Coordinator | MUN SWCC | Change and project management |
| Lisa Fleet | Evaluation lead | MUN medicine | Program evaluator, ethics approval |
| Nicholas Watters | MHCC lead: Direction and oversight | MHCC | Provide overall project direction and oversight to the core team/ project |
| Josh Rash | Fidelity lead | MUN psychology | Fidelity of implementation and outcome monitoring |
| Galin Kora | MHCC Evaluation Lead | MHCC | Provide direction on the evaluation from the MHCC perspective |
| Danielle Impey | Project support | MHCC | Provide support |
| Bonita Varga | Project support | MHCC | Provide support |
| Brad Yetman | Research assistant | MUN SWCC | Research support |

| Advisory Council | | | |
|---|---|---|---|
| **Member Name** | **Role** | **Organization** | **Responsibilities** |
| Peter Cornish | E-mental health/stepped care implementation and research project lead | MUN SWCC | Change and project management |
| Niki Legge | Provincial government co-lead | Gov. N.L. | Provincial Implementation |
| Nicholas Watters | MHCC lead: Direction and oversight | MHCC | Provide overall project direction and oversight to the core team/ project |
| NLCHI/Mary Slade | Platform implementation | Eastern Health IT | Manage platform development |
| Elizabeth Cawley | Research lead | MUN SWCC | Research design, ethics approval and training |
| Craig Norman | Manager | MUN SWCC | Oversee Integrated clinic Intervention |
| Meaghan McKeough | Client rep. | MUNMinds | Advise on program and evaluation from client perspective |
| Chris Lake | IT Consultant | MUN IT | Support platform development |
| Susan Powers | E-mental health vendor | TAO | Support on e-mental health program configuration |
| Geoffrey Soloway | E-mental health vendor | MindWell-U | Support on e-mental health program configuration |
| Ajay Pande | Commercialization | Stepped care solutions | Advise on IP and N.L. commercialization |
| Central, West, and Labrador rep. with lived experience | Client reps | | Advise on program and evaluation from client perspective |
| Todd Leader | Consultant | | Advise on change management plan |
| Michael Foote | Student perspective | MUN student, resident assistant | Student perspective |
| Cheryl Washburn | Mentor | UBC | Support implementation |
| Gillian Berry | Mentor | George Washington University | Support implementation |

# Appendix C

## Consultations by Peter Cornish since 2014

**TABLE C-1.**

| Institution | Address | Level of Adoption |
|---|---|---|
| Acadia University | Wolfville, N.S. | Workshop training in SC 2.0; adopted |
| Algonquin College | Nepean, Ont. | Workshop training and SC 2.0; fully implemented |
| Amherst College | Amherst, Mass. | Workshop training and SC 2.0; fully implemented |
| Arizona State University | Tempe, Ariz. | PSE SC 2.0 community of practice (CoP) member for monthly webinars |
| Atlantic School of Theology | Halifax, N.S. | Workshop training in SC 2.0; adopting |
| Aurora College | Yellowknife, N.W.T. | Workshop training in SC 2.0 |
| Ball State University | Muncie, Ind. | PSE SC 2.0 CoP member for monthly webinars |
| BC Mental Health and Substance Use Services | Vancouver, B.C. | Government consult on SC 2.0 |
| Bentley University | Waltham, Mass. | PSE SC 2.0 CoP member for monthly webinars |
| Berkeley University | Berkeley, Calif. | PSE SC 2.0 CoP member for monthly webinars |
| Bonavista Health Care Centre | Bonavista, N.L. | N.L. Tertiary care clinic workshop training and SC 2.0; fully implemented |
| Caldwell University | Caldwell, N.J. | PSE SC 2.0 CoP member for monthly webinars |
| California Polytechnic University | San Luis Obispo, Calif. | PSE SC 2.0 CoP member for monthly webinars |
| California State University | San Marcos, Calif. | PSE SC 2.0 CoP member for monthly webinars |

| Institution | Address | Level of Adoption |
|---|---|---|
| Calvin College | Grand Rapids, Mich. | Workshop training and SC 2.0; fully implemented |
| Cape Breton University | Sydney, N.S. | Workshop training in SC 2.0; adopting |
| Cardiff University | Cardiff, Wales | PSE SC 2.0 CoP member for monthly webinars |
| Central Michigan University | Mount Pleasant, Mich. | PSE SC 2.0 CoP member for monthly webinars |
| Centre City Team | St. John's, N.L. | N.L. tertiary care clinic workshop training and SC 2.0; fully implemented |
| Centennial College | Toronto, Ont. | Full-day training workshop for staff and stakeholders; adopting |
| Chapman University | Orange, Calif. | PSE SC 2.0 CoP member for monthly webinars |
| Clarenville | Clarenville, N.L. | N.L. tertiary care clinic workshop training and SC 2.0; fully implemented |
| Coastal Carolina University | Conway, S.C. | PSE SC 2.0 CoP member for monthly webinars |
| Columbia College Chicago | Chicago, Ill. | PSE SC 2.0 CoP member for monthly webinars |
| Concordia University of Edmonton | Edmonton, Alta. | PSE SC 2.0 CoP member for monthly webinars |
| Conestoga College | Kitchener, Ont. | Full-day workshop; adopting |
| Corner Brook MH and Addict. | Corner Brook, N.L. | N.L. tertiary care clinic workshop training and SC 2.0; fully implemented |
| Culver-Stockton College | Canton, Mo. | PSE SC 2.0 CoP member for monthly webinars |
| Dalhousie University | Halifax, N.S. | Workshop training and SC 2.0; fully implemented |
| Des Moines University | Des Moines, Iowa | PSE SC 2.0 CoP member for monthly webinars |
| Doorways Deer Lake | Deer Lake, N.L. | N.L. tertiary care clinic workshop training and SC 2.0; fully implemented |
| East End Clinic | St. John's, N.L. | N.L. tertiary care clinic workshop training and SC 2.0; fully implemented |
| Emory University | Atlanta, Ga. | PSE SC 2.0 CoP member for monthly webinars |
| Fanshawe College | London, Ont. | PSE SC 2.0 CoP member for monthly webinars |

| Institution | Address | Level of Adoption |
|---|---|---|
| Findlay University | Findlay, Ohio | PSE SC 2.0 CoP member for monthly webinars |
| Fleming College | Peterborough, Ont. | Workshop training and SC 2.0; fully implemented |
| Foundry BC Granville | Vancouver, B.C. | Integrated youth hubs consulted on SC 2.0; adopting |
| Foundry BC, Abbotsford | Abbotsford, B.C. . | Integrated youth hubs consulted on SC 2.0; adopting |
| Foundry BC, Campbell River | Campbell River, B.C. | Integrated youth hubs consulted on SC 2.0; adopting |
| Foundry BC, Kelowna | Kelowna, B.C. | Integrated youth hubs consulted on SC 2.0; adopting |
| Foundry BC, North Shore | North Vancouver, B.C. | Integrated youth hubs consulted on SC 2.0; adopting |
| Foundry BC, Prince George | Prince George, B.C. | Integrated youth hubs consulted on SC 2.0; adopting |
| Georgian College | Barrie, Ont. | Workshop training and SC 2.0; fully implemented |
| Goose Bay | Goose Bay, N.L. | N.L. tertiary care clinic workshop training; adopted |
| Grand Falls Windsor | Grand Falls-Windsor, N.L. | N.L. tertiary care clinic workshop training and SC 2.0; fully implemented |
| Hampshire College | Amherst, Mass. | Workshop training in SC 2.0 |
| Harbour Grace | Harbour Grace, N.L. | N.L. tertiary care clinic workshop training and SC 2.0; fully implemented |
| Healthy Child Manitoba | Winnipeg, Man. | Government consult on SC 2.0 |
| Holyoke Community College | Holyoke, Mass. | Workshop training in SC 2.0 |
| Humber College | Etobicoke, Ont. | Workshop training and SC 2.0; fully implemented |
| Idaho State University | Pocatello, Idaho | PSE SC 2.0 CoP member for monthly webinars |
| Illinois State University | Normal, Ill. | PSE SC 2.0 CoP member for monthly webinars |
| Ithaca College | Ithaca, N.Y. | Workshop training and SC 2.0; fully implemented |
| John Carroll University | University Heights, Ohio | PSE SC 2.0 CoP member for monthly webinars |

| Institution | Address | Level of Adoption |
|---|---|---|
| Kennesaw State University | Kennesaw, Ga. | PSE SC 2.0 CoP member for monthly webinars |
| Kids Help Phone | Toronto, Ont. | Invited on-site consultation for business partnership |
| Labrador West Health Ctr | Labrador City, N.L. | N.L. tertiary care clinic workshop training and SC 2.0; fully implemented |
| LDS Business College | Salt Lake City, Utah | PSE SC 2.0 CoP member for monthly webinars |
| Lewisporte Community Health Centre | Lewisporte, N.L. | N.L. tertiary care clinic workshop training and SC 2.0; fully implement |
| Luther College | Decorah, Iowa | PSE SC 2.0 CoP member for monthly webinars |
| Maine College of Art | Portland, Maine | PSE SC 2.0 CoP member for monthly webinars |
| McGill University | Montreal, Que. | Workshop training and SC 2.0; fully implemented |
| McMaster University | Hamilton, Ont. | PSE SC 2.0 CoP member for monthly webinars |
| Medicine Hat College | Medicine Hat, Alta. | PSE SC 2.0 CoP member for monthly webinars |
| MUN Student Wellness and Counselling Centre | St. John's, N.L. | Integrated primary care clinics with SC 2.0; implemented |
| Merrimack College | Andover, Mass. | PSE SC 2.0 CoP member for monthly webinars |
| Missouri S and T | Rolla, Mo. | PSE SC 2.0 CoP member for monthly webinars |
| Mount Allison University | Sackville, N.B. | Workshop training in SC 2.0; adopting |
| Mount Saint Vincent University | Halifax, N.S. | Workshop training in SC 2.0; adopting |
| Morneau Shepell | Toronto, Ont. | Invitation for on-site consultation and ongoing consulting |
| North Carolina State University | Raleigh, N.C. | PSE SC 2.0 CoP member for monthly webinars |
| Nova Scotia Department of Health | Halifax, N.S. | Invited on-site consultation contract to roll out SC 2.0 across the province; adopting |
| Nova Scotia School of Art and Design | Halifax, N.S. | Workshop training in SC 2.0; adopting |
| New Brunswick Community College | Fredericton, N.B. | PSE SC 2.0 CoP member for monthly webinars; adopting |

| Institution | Address | Level of Adoption |
|---|---|---|
| Oregon State University | Corvallis, Ore. | Workshop training and SC 2.0; fully implemented; adopted |
| Peel Regional Police | Mississauga, Ont. | First responder organization consult on SC 2.0; adopting |
| Pontificia Universidad Catolica de Chile | Santiago, Chile | Implementing in March 2019 |
| Rosalind Franklin University | North Chicago, Ill. | PSE SC 2.0 CoP member for monthly webinars |
| Ryerson University | Toronto, Ont. | PSE SC 2.0 CoP member for monthly webinars |
| Samford University | Homewood, Ala. | PSE SC 2.0 CoP member for monthly webinars; fully adopted |
| Shea Heights Integrated Primary Care | Shea Heights, N.L. | Integrated primary care clinics with SC 2.0; implemented |
| Sheridan College | Oakville, Ont. | Two-day workshop; adopting |
| Simon Fraser University | Burnaby, B.C. | Full-day onsite workshop; PSE SC 2.0 CoP member for monthly webinars; adopting |
| Smith College | Northampton, Mass. | Workshop training in SC 2.0 |
| Springdale mental Health and Counselling | Springdale, N.L. | N.L. tertiary care clinic workshop training; adopted |
| St. Anthony Mental Health and Addiction | St. Anthony, N.L. | N.L. tertiary care clinic workshop training; adopted |
| St. Francis of Xavier University | Antigonish, N.S. | Workshop training in SC 2.0; adopting |
| St. Mary's University | Halifax, N.S. | Workshop training in SC 2.0; adopting |
| St. Norbert College | De Pere, Wis. | PSE telephone consult with administrator |
| St. Thomas University | Fredericton, N.B. | Workshop training in SC 2.0 |
| Stephenville mental Health and Addiction | Stephenville, N.L. | N.L. tertiary care clinic workshop training; adopted |
| SUNY Brockport | Brockport, N.Y. | PSE SC 2.0 CoP member for monthly webinars |
| SUNY Buffalo | Buffalo, N.Y. | Workshop training and SC 2.0; fully implemented |
| SUNY Fredonia | Fredonia, N.Y. | PSE SC 2.0 CoP member for monthly webinars; adopting |
| Stanford University | Stanford, Calif. | Telephone consultation; PSE SC 2.0 CoP member for monthly webinars; adopting |

| Institution | Address | Level of Adoption |
|---|---|---|
| Skidmore College | Saratoga Springs, N.Y. | On-site training and keynote at N.Y. Counseling Center Conference PSE SC 2.0 CoP member for monthly webinars |
| Southern Connecticut University | New Haven, Conn. | PSE SC 2.0 CoP member for monthly webinars; multiple in-person and phone consultations |
| Susquehanna University | Selinsgrove, Pa. | PSE SC 2.0 CoP member for monthly webinars |
| TAO Connect | St. Petersburg, Fla. | Private sector e-mental health implementation of SC 2.0 |
| George Washington University | Washington, D.C. | Workshop training and SC 2.0; fully implemented |
| Michener Institute | Toronto, Ont. | Workshop training and SC 2.0; fully implemented |
| University of Winnipeg | Winnipeg, Man. | PSE telephone consult with administrator |
| Thomas College | Waterville, Maine | PSE SC 2.0 CoP member for monthly webinars |
| Trent University | Peterborough, Ont. | Workshop training and SC 2.0; fully implemented |
| UBC Okanagan | Kelowna, B.C. | Workshop training in SC 2.0; adopted |
| UCLA | Los Angeles, Calif. | PSE SC 2.0 CoP member for monthly webinars |
| University of Arkansas | Fayetteville, Ark. | PSE SC 2.0 CoP member for monthly webinars |
| Université de Moncton | Moncton, N.B. | Workshop training in SC 2.0; adopting |
| Université Sainte-Anne | Pointe-de-l'Église, N.S. | Workshop Training in SC 2.0 |
| University of Akron | Akron, Ohio | PSE telephone consult with administrator |
| University of British Columbia | Vancouver, B.C. | Workshop training and SC 2.0; fully implemented |
| University of Calgary | Calgary, Alta. | PSE SC 2.0 CoP member for monthly webinars |
| University of California San Diego | La Jolla, Calif. | PSE SC 2.0 CoP member for monthly webinars |

| Institution | Address | Level of Adoption |
| --- | --- | --- |
| University of Central Oklahoma | Edmond, Okla. | PSE SC 2.0 CoP member for monthly webinars |
| University of Connecticut | Storrs, Conn. | PSE SC 2.0 CoP member for monthly webinars |
| University of Hartford | West Hartford, Conn. | Workshop training |
| University of Houston | Houston, Tex. | PSE SC 2.0 CoP member for monthly webinars |
| University of Kings College | Halifax, N.S. | Workshop training in SC 2.0; adopting |
| University of Maine | Orono, Maine | PSE SC 2.0 CoP member for monthly webinars |
| University of Manitoba | Winnipeg, Man. | Workshop training in SC 2.0 |
| University of Massachusetts – Amherst | Amherst, Mass. | Workshop training and SC 2.0; fully implemented |
| University of Michigan | Dearborn, Mich. | PSE SC 2.0 CoP member for monthly webinars Invited to present as keynote at conference |
| University of Missouri | Columbia, Mo. | PSE SC 2.0 CoP member for monthly webinars |
| University of New Brunswick | Fredericton, N.B. | Workshop training in SC 2.0 |
| University of North Carolina | Chapel Hill, N.C. | PSE SC 2.0 CoP member for monthly webinars |
| University of North Texas | Denton, Tex. | PSE SC 2.0 CoP member for monthly webinars |
| University of Ottawa | Ottawa, Ont. | Workshop training and SC 2.0; fully implemented |
| University of Oregon | Eugene, Ore. | PSE SC 2.0 CoP member for monthly webinars |
| University of Pennsylvania | Philadelphia, Pa. | PSE SC 2.0 CoP member for monthly webinars |
| University of Prince Edward Island | Charlottetown, P.E.I. | Workshop training in SC 2.0 |
| University of Regina | Regina, Sask. | Workshop training and SC 2.0; fully implemented |
| University of South Florida | Tampa, Fla. | PSE SC 2.0 CoP member for monthly webinars |

| Institution | Address | Level of Adoption |
|---|---|---|
| University of Texas, San Antonio | San Antonio, Tex. | PSE SC 2.0 CoP member for monthly webinars |
| University of Victoria | Victoria, B.C. | Workshop training and SC 2.0; fully implemented |
| University of Waterloo | Waterloo, Ont. | PSE SC 2.0 CoP member for monthly webinars |
| University of West Florida | Pensacola, Fla. | PSE SC 2.0 CoP member for monthly webinars |
| University of Windsor | Windsor, Ont. | Workshop training and SC 2.0; fully implemented |
| Valparaiso University | Valparaiso, Ind. | PSE SC 2.0 CoP member for monthly webinars |
| Washington Jefferson College | Washington, Pa. | PSE SC 2.0 CoP member for monthly webinars |
| Wellesley College | Wellesley, Mass. | PSE SC 2. CoP member for monthly webinars |
| WellTrack | Fredericton, N.B. | Private sector e-mental health implementation of SC 2.0 |
| West End/CBS | Mount Pearl, N.L. | N.L. tertiary care clinic workshop training; fully adopted |
| Western Washington University | Bellingham, Wash. | PSE SC 2.0 CoP member for monthly webinars |

**TABLE C-2.** KEYNOTE ADDRESSES BY PETER CORNISH.

| Date | Title | Conference | Audience |
|------|-------|------------|----------|
| June 19 | 1. SC 2.0 in North America<br>2. SC 2.0 in New York State: Experiences of Three PSEs | Opening keynote and plenary panel, Counseling Centers of New York annual conference, Saratoga Springs, N.Y. | Counsellors and counselling administrators (*n* = 150) |
| March 19 | 1. SC 2.0: A Framework for Rapid Access, Flexible Care Options<br>2. SC 2.0 Here and There: Plenary Panel on International Experiences | Opening keynote and plenary panel, Annual Depression on College Campuses Conference, Ann Arbor, Mich. | Mental health researchers and providers (*n* = 300) |
| October 18 | Stepped care in Ontario panel | Keynote panel at the Centre for Innovation in Campus Mental Health Conference, Toronto, ON | Counsellors and PSE administrators (*n* = 400) |
| June 18 | SC 2.0 and the Student Success Collaborative: Systems for Maximizing Student Well-Being and Academic Excellence | Invited plenary address: Association of Registrars of the Universities and Colleges of Canada/Canadian Association of College and University Student Services Convention, Charlottetown, PEI | Student affairs professionals, registrars, academic advisors (*n* = 1000) |
| June 18 | SC 2.0 in N.L. | Invited opening presentation to the Canadian Intergovernmental Conference Secretariat Conference of Federal, Provincial and Territorial Ministers of Health, Winnipeg, MB | 26 ministers and deputy ministers |
| October 17 | Thriving in the Context of SC 2.0: A System for Organizing Mental Health Supports, Pre-Kindergarten through Post-Secondary Education | Keynote address for the Council of Atlantic Ministers of Education and Training | Atlantic directors, senior managers and deputy ministers of education and health (*n* = 120) |
| October 17 | SC 2.0: Scaffolding for Rapid Care Access in the Context of a Thriving Campus Community | Closing keynote address, Centre for Innovation in Campus Mental Health Conference, Toronto, ON | Counsellors and PSE administrators (*n* = 250) |

# Appendix D

## Additional Supporting Data

**TABLE D-1.** PROJECT OBJECTIVES IN DETAIL

| Impact | Evaluation Questions | | Data Source | Data Collection |
|---|---|---|---|---|
| | **Stepped Care** | **E-Mental Health** | | |
| Health-care providers/local service delivery | What are the benefits of using the stepped care model?<br><br>What are the challenges with using the stepped care model? | What are the benefits of using the e-mental health component within stepped care?<br><br>What are the challenges with using the e-mental health component within stepped care ? | Health-care providers<br><br>Site managers | Pre-training workshop and survey |
| | To what extent is stepped care used or adopted in practice?<br><br>What has been the impact of using stepped care on health-care provider satisfaction? | To what extent is the e mental health component within stepped care used or adopted in practice?<br><br>What has been the impact of using the e-mental health component within stepped care on health-care provider satisfaction? | Health-care providers<br><br>Site managers | Post-training survey<br><br>Usage data from pilot sites |
| | What resources do you need to use the stepped care model in practice?<br><br>What changes need to be made to the existing system to properly use the stepped care model? | What resources do you need to use the e-mental health component within stepped care in practice?<br><br>What changes need to be made to the existing system to properly use the e-mental health component within the stepped care model? | Health-care providers<br><br>Site managers | Post-training workshop and survey |

| Impact | Evaluation Questions | | Data Source | Data Collection |
|---|---|---|---|---|
| | **Stepped Care** | **E-Mental Health** | | |
| Clients/patients | What are the demo-graphic/ population characteristics of patients using the stepped care model? | What are the demo-graphic/ population characteristics of patients using the e-mental health component within the stepped care model? | Site managers or N.L. Gov't. | Aggregate patient statistics via administrative site records |
| | What are the benefits of using the stepped care model? | What are the benefits of using the e-mental health component within the stepped care model? | Patients (no direct contact) | Anonymous patient survey distributed by or within sites |
| | What are the challenges with using the stepped care model? | What are the challenges of using the e-mental health component within the stepped care model? | | |
| | | What are the reasons why some patients choose not to use the e-mental health component within the stepped care model? | | |
| Health-care system | What has been the impact of stepped care on regional health services? | What has been the impact of using the e-mental health component within the stepped care model on regional health services? | Site managers N.L. Gov't. interviews | Usage/impact data from pilot sites |
| | What has been the impact of using the stepped care model on wait times? | What has been the impact of using the e-mental health component within the stepped care model on wait times? | | |
| | What has been the impact of using the stepped care model in the cost-effectiveness of the services? | What has been the impact of using the e-mental health component within the stepped care model in the cost-effectiveness of the services? | | |

**TABLE D-2.** BASELINE FAMILIARITY AND COMFORT WITH E-MENTAL HEALTH PROGRAMMING

| E-Mental Health Tool | Familiarity (M/SD) | Comfort (M/SD) |
|---|---|---|
| BreathingRoom | 4.02/1.81 | 4.40/1.82 |
| Bridge the gApp | 4.60/1.76 | 4.82/1.82 |
| Strongest Families | 3.92/2.10 | 4.15/2.25 |
| TAO | 3.89/1.80 | 4.58/1.72 |

*N* = 111 providers

**TABLE D-3.** BASELINE DIFFERENCES BETWEEN RURAL AND URBAN PROVIDERS

| Variable | Rural (M/SD) | Urban (M/SD) | t-value |
|---|---|---|---|
| **Familiarity** | | | |
| BreathingRoom | 4.93/1.51 | 3.45/1.78 | 4.40** |
| Bridge the gApp | 5.17/1.51 | 4.26/1.83 | 2.67** |
| Strongest Families | 5.29/1.44 | 3.01/1.95 | 6.48** |
| TAO | 4.00/1.78 | 3.85/1.78 | 0.43 |
| **Comfort integrating** | | | |
| BreathingRoom | 5.17/1.45 | 3.92/1.89 | 3.63** |
| Bridge the gApp | 5.50/1.45 | 4.39/1.91 | 3.20** |
| Strongest Families | 5.48/1.51 | 3.27/2.22 | 5.64** |
| TAO | 5.00/1.51 | 4.32/1.81 | 2.02* |

$N$ = 111; degree of freedom ($df$) = 106; * = $p < .05$; ** = $p < .01$

**TABLE D-4.** PAIRED SAMPLE $T$-TESTS REPORTING ON CHANGE FROM PRE-TEST TO POST-TEST AMONG PROVIDERS

| Variable | $M_{Diff}$ | SE | t | df | p |
|---|---|---|---|---|---|
| Stepped care (SC) knowledge | 1.27 | 0.25 | 5.23 | 16 | 0.0 |
| SC self-efficacy | 1.23 | 0.31 | 3.92 | 16 | 0.0 |
| Stage of change | 1.5 | 0.22 | 6.71 | 15 | 0.0 |
| Affective commitment | 0.25 | 0.26 | 0.98 | 16 | 0.34 |
| Continuance commitment | -0.17 | 0.37 | 0.046 | 16 | 0.66 |
| Normative commitment | -0.25 | 0.21 | 1.18 | 16 | 0.25 |
| Controlled motivation | 1.8 | 0.29 | 6.09 | 15 | 0.0 |
| Autonomous motivation | 0.09 | 0.21 | 0.41 | 16 | 0.69 |
| Relative autonomy index | -0.01 | 0.22 | 0.07 | 16 | 0.95 |
| Perceived credibility of SC | 0.19 | 0.26 | 0.72 | 16 | 0.48 |
| Perceived expected benefit of SC | 0.1 | 0.3 | 0.32 | 16 | 0.75 |
| Familiarity with BreathingRoom | 0.5 | 0.38 | 1.33 | 15 | 0.2 |
| Familiarity with Bridge the gApp | 1.12 | 0.29 | 3.92 | 15 | 0.0 |
| Familiarity with Strongest Families | 0.87 | 0.35 | 2.48 | 14 | 0.03 |
| Familiarity with TAO | 1.31 | 0.37 | 3.52 | 15 | 0.0 |
| Comfort with BreathingRoom | 0.27 | 0.42 | 0.64 | 14 | 0.54 |
| Comfort with Bridge the gApp | 0.87 | 0.29 | 2.99 | 14 | 0.01 |
| Comfort with Strongest Families | 0.61 | 0.37 | 1.67 | 12 | 0.12 |
| Comfort with TAO | 1.0 | 0.53 | 1.9 | 14 | 0.08 |

**TABLE D-5.** PAIRED SAMPLE *T*-TESTS REPORTING ON CHANGE FROM PRE-TEST TO POST-TEST AMONG MANAGERS

| Variable | M$_{Diff}$ | SE | t | df | p |
|---|---|---|---|---|---|
| Stepped care (SC) knowledge | 1.28 | 0.28 | 4.63 | 6 | 0.0 |
| SC self-efficacy | 0.94 | 0.44 | 2.16 | 5 | 0.08 |
| Stage of change | 2.17 | 0.48 | 4.54 | 5 | 0.0 |
| Affective commitment | -0.13 | 0.21 | 0.61 | 6 | 0.56 |
| Continuance commitment | -0.14 | 0.36 | 0.38 | 6 | 0.72 |
| Normative commitment | 0.19 | 0.47 | 0.4 | 6 | 0.7 |
| Controlled motivation | 2.65 | 0.97 | 2.72 | 4 | 0.05 |
| Autonomous motivation | 0.13 | 0.25 | 0.5 | 5 | 0.64 |
| Relative autonomy index | 0.65 | 0.5 | 1.31 | 4 | 0.26 |
| Perceived credibility of SC | 0.83 | 0.43 | 1.95 | 5 | 0.11 |
| Perceived expected benefit of SC | 0.22 | 0.53 | 0.42 | 5 | 0.7 |
| Familiarity with BreathingRoom | 0.71 | 0.75 | 0.96 | 6 | 0.38 |
| Familiarity with Bridge the gApp | 0.28 | 0.42 | 0.68 | 6 | 0.52 |
| Familiarity with Strongest Families | 0.71 | 0.68 | 1.05 | 6 | 0.33 |
| Familiarity with TAO | 1.0 | 0.76 | 1.32 | 6 | 0.23 |
| Comfort with BreathingRoom | 1.5 | 0.72 | 2.09 | 5 | 0.09 |
| Comfort with Bridge the gApp | 1.5 | 0.56 | 2.67 | 5 | 0.04 |
| Comfort with Strongest Families | 0.83 | 0.4 | 2.08 | 5 | 0.09 |
| Comfort with TAO | 1.17 | 0.65 | 1.78 | 5 | 0.14 |

**TABLE D-6.** TAO VARIABLES: CUT-OFF RCI SCORES

| Variable | Clinical Cut-Off | RCI |
|---|---|---|
| Global mental health | 2.78 | 0.77 |
| Well-being | 1.89 | 0.80 |
| Life functioning | 2.37 | 0.68 |
| Symptomatology | 3.00 | 0.51 |

*Note.* Data taken from Kopta, M., Owen, J., & Budge, S. (2015). Measuring psychotherapy outcomes with the Behavioral Health Measure-20: Efficient and comprehensive. *Psychotherapy, 52*(4), 442-448. http://dx.doi.org/10.1037/pst0000035