BMJ Open Quality

Enhanced recovery support for people with eating disorders during the COVID-19 pandemic: quality improvement using a web-based, stepped-care programme in Canada

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To cite: Wood MD, Smith JL, Healey H, *et al*. Enhanced recovery support for people with eating disorders during the COVID-19 pandemic: quality improvement using a web-based, stepped-care programme in Canada. *BMJ Open Quality* 2023;**12**:e002366. doi:10.1136/bmjoq-2023-002366

► Additional supplemental material is published online only. To view, please visit the journal online (http://dx.doi.org/10.1136/bmjoq-2023-002366).

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Received 4 April 2023
Accepted 26 October 2023

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ABSTRACT

Background Throughout the COVID-19 pandemic, the number of individuals struggling with eating disorders (EDs) increased substantially. Body Brave (a not-for-profit) created and implemented a web-based stepped-care Recovery Support Programme (RSP) to improve access to community-based ED services. This quality improvement study describes the RSP and assesses its ability to deliver timely access to treatment and platform engagement.

Methods We conducted a retrospective cohort study comparing access to, and use of Body Brave services 6 months before and 12 months after implementation of the RSP platform (using 6-month increments for two postimplementation periods). Primary programme quality measures included registration requests, number of participants onboarded and time to access services; secondary measures included use of RSP action plans, attendance for recovery sessions and workshops, number of participants accessing treatment and text-based patient experience data.

Results A substantial increase in registration requests was observed during the first postimplementation period compared with the preimplementation period (176.5 vs 85.5; p=0.028). When compared with the preimplementation period, the second postimplementation observed a significantly larger percentage of successfully onboarded participants (76.6 vs 37.9; p<0.01) and a reduction in the number of days to access services (2 days vs 31 days; p<0.01). Although participant feedback rates were low, many users found the RSP helpful, easy to access, user-friendly and were satisfied overall. Users provided suggestions for improvement (eg, a platform instructional video, offer multiple times of day for live sessions and drop-in hours).

Conclusions Although clinical benefit needs to be assessed, our findings demonstrate that the RSP enabled participants to quickly onboard and access initial services and have informed subsequent improvements. Understanding initial programme effects and usage will help assess the feasibility of adapting and expanding the RSP across Canada to address the urgent need for low-barrier, patient-centred ED care.

WHAT IS ALREADY KNOWN ON THIS TOPIC

⇒ The long-term adverse effects and importance of early access to care for people with eating disorders (EDs) or disordered eating (DE) are well established. Since the onset of the COVID-19 pandemic, wait times for many treatment programmes in Canada have substantially increased, resulting in increased treatment dropout and symptom burden. Providing immediate, low-barrier resources and continued support is paramount to helping people understand their ED/DE and navigate recovery.

WHAT THIS STUDY ADDS

⇒ An online ED/DE stepped care Recovery Support Programme (RSP) implemented by a community-based ED support and treatment organisation met higher registration requests during the COVID-19 pandemic while increasing capacity and reducing time to access care substantially. This quality improvement study will inform iterative improvements to the RSP.

HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

⇒ The RSP addresses a critical need within Canada for low-barrier, online, self-guided, stepped-care support provided by community-based organisations, which could alleviate the pressure on an overburdened healthcare system and has the potential to improve outcomes for people with EDs and DE.

INTRODUCTION

Eating disorders (EDs) represent a class of psychiatric disorders that substantially affect one's physical, mental and social health[1] and reduce quality of life and social functioning. These combined factors often result in suicidal ideation,[2–4] contributing to the high mortality risk of EDs compared with other psychiatric disorders.[5–8] While the prevalence

of EDs in Canada is difficult to assess due to diagnostic and reporting barriers, recent studies indicate that EDs are common and estimate that 5.5 million females and 2 million males are affected by significant eating-related struggles.[9]

Despite the widespread availability of evidence-based transdiagnostic treatments for EDs, only 49% of women and 31% of men access support,[10] and there is a substantial delay between symptom onset and treatment initiation, taking up to 5.6 years for people with EDs to seek help.[11] Once ready to seek help, patients face additional barriers when accessing the appropriate treatment services. Attitudes and beliefs, socioeconomic status and systemic factors substantially affect one's ability to access the appropriate course of treatment.[12 13] Barriers to treatment are correlated with increased ED symptom severity,[14] thus, mitigating barriers is essential for individuals with EDs and disordered eating (DE), particularly for underserved populations.[15]

Providing timely access to services can improve outcomes for people with EDs. Since the onset of the COVID-19 pandemic, wait times for many ED treatment programmes in Canada increased to over 6 months,[16 17] leading to increased risk for treatment dropout[18] and higher severity of illness-associated burden.[18–20] Time spent on waitlists has been shown to predict dropouts for outpatient ED treatment.[18] Self-guided, internet-based ED interventions have emerged as valuable tools,[21] particularly during the early COVID-19 pandemic, as they address conventional barriers to care and provide ongoing support beyond treatment. Such resources offer a unique opportunity to potentially maintain patient motivation and momentum for treatment engagement once it becomes available.[18 22]

Stepped-care interventions have gained recognition as patient-centred and effective approaches to mental health. This model starts with interventions that are lower in intensity and escalates to higher-intensity options depending on the need and responses of patients.[23 24] The model is notable for being the least restrictive regarding initial access and self-correcting in that patients can move up and down the steps as necessary.[23] Stepped-care has shown improved efficacy over usual care in people with anxiety disorders[24] and is at least as effective in people with depression.[25]

Technology-enabled mental health platforms offer personalised care choices aligned with patient preferences and needs, promoting a collaborative and patient-guided treatment approach while mitigating barriers to access. This integration aligns with the WHO's emphasis on timely and equitable access to health services as essential components of high-quality healthcare.[26] By leveraging technology-enabled mental health platforms, these interventions have the potential to effectively improve care quality by addressing traditional barriers and enhancing accessibility, patient-centredness and tailoring of mental healthcare to individual needs.

Objective

In response to greater demands for access to ED support, we developed and implemented an online, self-guided Recovery Support Programme (RSP) that integrates a stepped-care approach. In this quality improvement study, we assess the initial effects of the programme on timely access to care in people seeking help for their EDs or DE from a community-based organisation, Body Brave, and explore the usage of the RSP components to inform further improvements to the platform. Understanding initial programme effects and usage will help Body Brave assess the feasibility of adapting and expanding the programme across other settings within the Canadian healthcare system to address the urgent need for low-barrier, participant-centred ED care.

METHODS

Setting and programme implementation

Body Brave, a charitable organisation based in Hamilton, Ontario, Canada, provides free access to community-based ED treatment and support.[27] In March 2021, in response to an increase in requests to register at Body Brave for access to programmes during the COVID-19 pandemic, the organisation developed and implemented an online, self-guided RSP through the Careteam digital platform.[28] The purpose of the RSP was to rapidly deliver low-barrier ED support to Canadians aged 17 years or older who are initially seeking help, waiting for admission to a hospital-based treatment programme, or transitioning out of the hospital. The concept for the programme was based on literature suggesting web-based, self-help resources could be beneficial as an early intervention strategy that supports help-seeking given that they are immediately available, flexible, location-independent and relatively low-cost.[29]

Through the web-based RSP, users can instantly access self-guided, low-barrier support (figure 1B) through sequential action plan 'tasks' including weekly, self-reflection surveys known as 'Check-ins' (online supplemental file 1) and scheduled virtual support sessions (webinars) composed of 'recovery sessions' and psychoeducational 'workshops' (online supplemental file 2), which were recorded and available on-demand via the platform. Based on a stepped-care model, the RSP is intended to act as the initial step along a staged system of interventions, from the least to the most intensive, matched to a person's preference and clinical needs (figure 1B), allowing them to 'step up' or 'step down' their intensity of RSP care.[30–32] If the individual needs or wants more intensive care, a task within the RSP action plan directs them to book an intake appointment with the Body Brave clinical team (ie, a social worker, dietitian or family physician). During the intake appointment, the Body Brave clinician and user collaboratively identify treatment services or refer them to their primary care physician or for more intensive hospital-based care, as required.

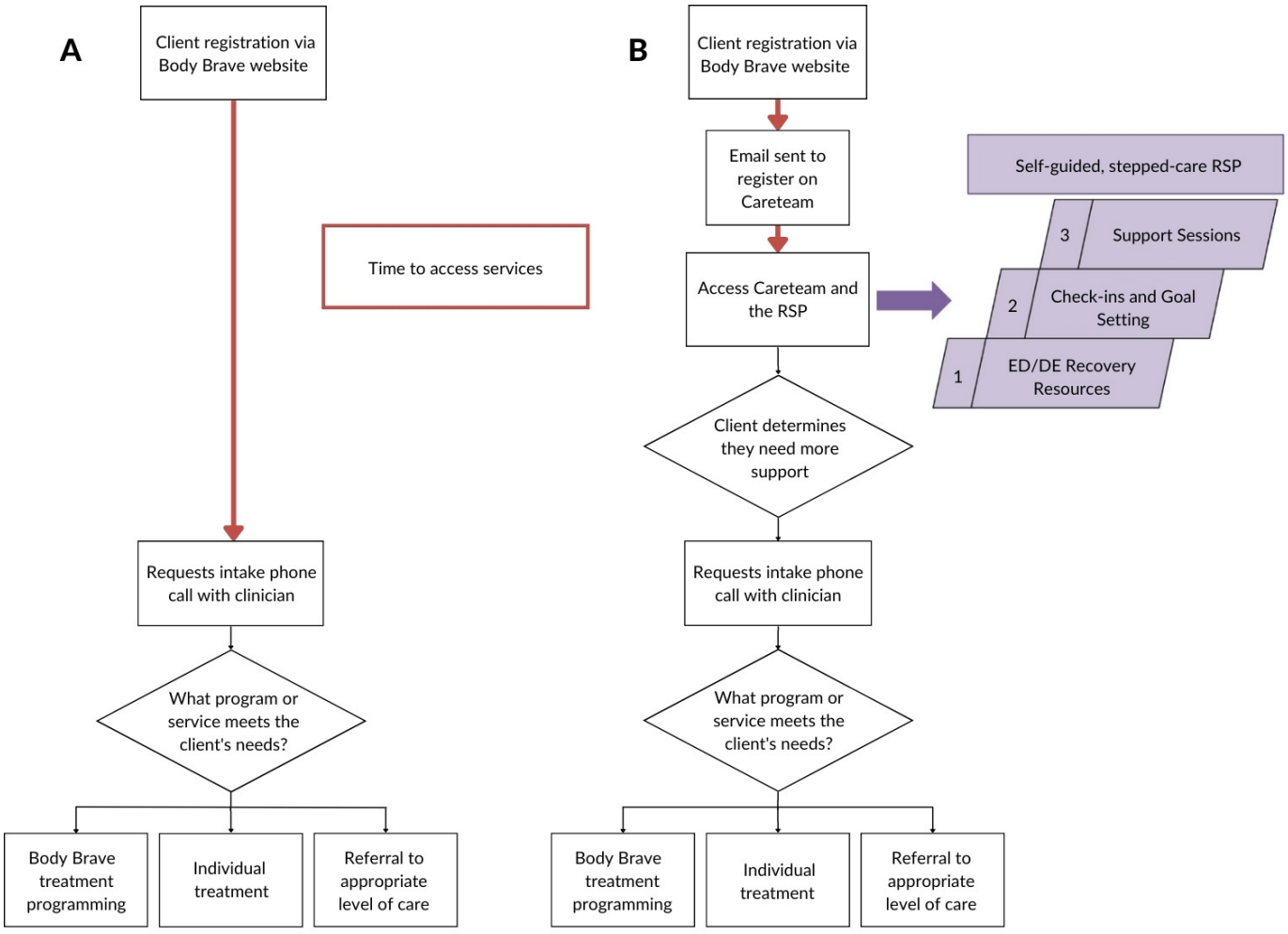

Figure 1 Body Brave registration and intake process (A) before and (B) after developing and implementing the self-guided, stepped care Recovery Support Programme (RSP), depicted in purple. The thicker red arrows indicate the time to access services. DE, disordered eating; ED, eating disorder.

Development of the Body Brave RSP stepped-care components followed a systematic approach, including a comprehensive literature review for evidence-based interventions for EDs and discussions with community stakeholders, including clinicians and individuals with personal experience in ED recovery. Through these discussions, we identified self-guided resources that effectively promote recovery from an ED and leverage existing self-guided resources publicly available in Canada. Once key programme components and resources were identified, Body Brave conducted internal Plan-Do-Study-Act (PDSA) cycles during the first 4 months of the RSP's lifespan to fine-tune the RSP. This quality improvement approach was chosen as an appropriate evaluation approach because it encourages small-scale, iterative improvements that provide an opportunity to gather evidence supporting the programme's efficacy and engage stakeholders as confidence in the intervention grows.[33]

Preimplementation registration process

Before developing and implementing the RSP, all participants who registered with Body Brave had a scheduled intake phone appointment with a staff clinician and were onboarded manually—a rate-limiting step (figure 1). During this intake appointment, the clinician assessed the health status of the participant (based on clinical judgement) and determined if they were suitable candidates for one of Body Brave's treatment groups (drop-in or 10-week group), required personalised treatment with a registered healthcare provider (ie, psychotherapist or registered dietitian), or required referral to a higher-intensity hospital-based ED programme.

Study design

The study was an observational quality improvement activity, following the definition of Backhouse and Ogunlayi.[34] Its objective was to enhance service provision and outcomes for users by implementing data-driven evaluation practices. By incorporating these methods, the study aimed to inform and drive future improvements in the programme's development to enhance user experiences and overall service quality,[34] which future studies on the RSP will explore. No participants were approached, and the Hamilton Integrated Research Ethics Board waived the requirement for written informed consent on 4 April

2022. Findings are reported following the Standards for Quality Improvement Reporting Excellence checklist.[35]

Sample

We retrospectively evaluated registrations and use of the RSP using a convenience sample of aggregated data from Body Brave and the Careteam platform, comparing defined process measures between preimplementation and postimplementation periods. Specifically, 6 months of preimplementation data were manually gathered from Body Brave records of registrations and intake appointments between 11 September 2020 and 23 February 2021. Postimplementation periods were defined as two consecutive 6 month periods: (a) between 1 March 2021 and 31 August 2021 and (b) between 1 September 2021 and 28 February 2022; during the first 6 month postimplementation, Careteam was in use, and the RSP was developed in response to the findings from the PDSA cycles; in the latter 6 months, the RSP was used in a stable implementation.

All new participants who completed registration with Body Brave within the specified time ranges were included. Participants were excluded if they completed registration with Body Brave before 11 September 2020 or were onboarded to the Careteam platform after 28 February 2022.

Quality improvement measure

The primary quality measures to assess changes in service delivery preimplementation and postimplementation were: (1) the total number of monthly requests for registration, (2) the number of participants successfully onboarded and (3) the time taken to access services (median number of days between participant request for registration to initial service access). Access to service was defined as the 'opportunity to identify healthcare needs, to seek healthcare services, to reach, to obtain or use healthcare services, and to have a need for services fulfilled'.[36] To further assess user engagement with the RSP after implementation, secondary quality measures included: (1) the average number of action plan tasks completed; (2) the monthly average number of check-ins completed; (3) the number of Body Brave support sessions offered; (4) participant attendance rates at virtual events; (5) satisfaction with the RSP and support sessions; (6) the number of participants who accessed treatment services following initiation of the RSP and (7) strengths and suggestions for improvement of the RSP gathered through text-based participant survey feedback.

Data collection

User demographic data were gathered for all periods, including age range, residing in Canada, province of residence, student status and how participants heard about Body Brave. Primary data, including monthly registration requests and deidentified user characteristics, across the whole study period were collected through the Body Brave registration form via the organisation's website. For the 6-month preimplementation period, onboarding success and wait time to initial service access (ie, number of days from registration to completion of a clinical intake call) were extracted from internal audit documents by Body Brave staff. For the postimplementation stage, data on onboarding success and wait time to initial service access (ie, number of days from registration to activation of the RSP action plan on Careteam) were extracted from the same documents.

Secondary quality measure data includes quantitative and qualitative feedback on the RSP, which was gathered using QuestionPro Survey[37] embedded within the RSP action plan. Through an internally developed user experience and feedback survey, we asked users what they liked most about the RSP and if they had RSP improvement suggestions (online supplemental file 3); survey measurement indicators, including hopefulness, self-efficacy, social support, sense of belonging and emotional well-being, were guided by a literature review on practice-based evidence, focusing on the perspectives of individuals who have firsthand experience with ED recovery. User data on engagement with the platform, including engagement with action plan tasks and monthly check-ins, as well as the number of participants who accessed Body Brave treatment services following the use of the RSP, were extracted by a Careteam platform analyst. Support sessions were conducted in Zoom,[38] and attendance data were extracted from deidentified Zoom attendee reports.

Statistical analysis

The Kruskal-Wallis rank sum test was used to determine if there were significant differences in the number of registration requests, participants successfully onboarded and the time to access services (ie, number of days between participant request for registration to initial service access) in the 6 months before Careteam implementation (preimplementation) and two successive 6 months increments (postimplementation period 1, postimplementation period 2) following implementation. Dunn's Multiple Comparisons Test was used, with Bonferroni adjustment, when the Kruskal-Wallis rank sum test was significant. When the Bonferroni correction was applied, the corrected p value was stated. All data analysis were conducted using R V.4.1.3.[39] Text-based survey response data were imported into NVivo[40] to code and summarise feedback received about the RSP and the Careteam platform. Lastly, secondary quality measure data were aggregated by month, and descriptive statistics (like median, mean and SD) were calculated, but no statistical comparisons were made.

RESULTS

Participant characteristics

Throughout the project, we collected data from 1525 participants, 195 in the 6-month preimplementation period and 1330 in the 12-month postimplementation period (table 1). As it was optional to answer

Table 1 Participant demographics

Characteristic	Overall N=1525	6 months preimplementation (N=195)	12 months postimplementation (N=1330)
Age range			
17–19	110 (7%)	23 (12%)	87 (7%)
20–29	428 (28%)	92 (47%)	336 (25%)
30–39	231 (15%)	32 (16%)	199 (15%)
40–49	128 (8%)	25 (13%)	103 (8%)
50–59	68 (5%)	16 (8%)	52 (3.9%)
60–69	24 (2%)	6 (3%)	18 (1%)
70+	4 (0.3%)	0	4 (0.3%)
Missing	532 (35%)	1 (0.5%)	531 (40%)
Residing in Canada*			
Yes	1000 (66%)	195 (100%)	805 (61%)
Missing	525 (34%)	0	525 (39%)
Province/territory†			
Alberta	11 (0.7%)	3 (2%)	8 (0.6%)
British Columbia	20 (1%)	2 (1%)	18 (1%)
Nova Scotia	6 (0.4%)	0	6 (0.5%)
Ontario	939 (62%)	188 (96%)	751 (56%)
Quebec	8 (0.5%)	0	8 (0.6%)
Other provinces/territories	17 (1.1%)	2 (1.0%)	10 (0.8%)
Missing	525 (34%)	0	525 (39%)
Student status			
Yes	245 (16%)	61 (31%)	184 (14%)
No	503 (33%)	133 (68%)	370 (28%)
Missing	777 (51%)	1 (0.5%)	776 (58%)
How participants heard about Body Brave			
Healthcare provider	498 (33%)	102 (52%)	396 (30%)
Loved one/friend/colleague	113 (7%)	26 (13%)	87 (7%)
Online Ad	15 (1%)	6 (3%)	9 (0.7%)
Other	86 (6%)	8 (4%)	78 (6%)
Social media	79 (5%)	15 (8%)	64 (5%)
Web search	209 (14%)	38 (19%)	171 (13%)
Missing	525 (34%)	0	525 (9%)

*The question stated 'Our programmes are currently only open to Canadian residents. Do you reside in Canada?'
†Provinces and territories with <5 participants are combined.

demographic questions, data for 34% to 58% of participants were missing. Of respondents, 769/997 (77%) were under 39 years of age, and 245/748 (33%) were students; all resided in Canada, with 939/1000 (94%) residing in Ontario; 498/1000 (49%) participants heard about the programme through a healthcare provider, 209/1000 (21%) through a web search and 113/1000 (11%) through a loved one, friend or colleague.

Primary quality measures

The median number of participants per month that requested registration during the 6-month preimplementation period and 12-month postimplementation periods 1 and 2, respectively, were 85.5, 176.5 and 158.0, with significant differences between the periods (p=0.029). There were fewer requests during the preimplementation period than postimplementation period 1 (85.5, IQR 75.3–91.3 vs 176.5, IQR 155.0–189.0; p=0.028); postimplementation period 2 (158.0, IQR 171.75–142.8) was not significantly different from the

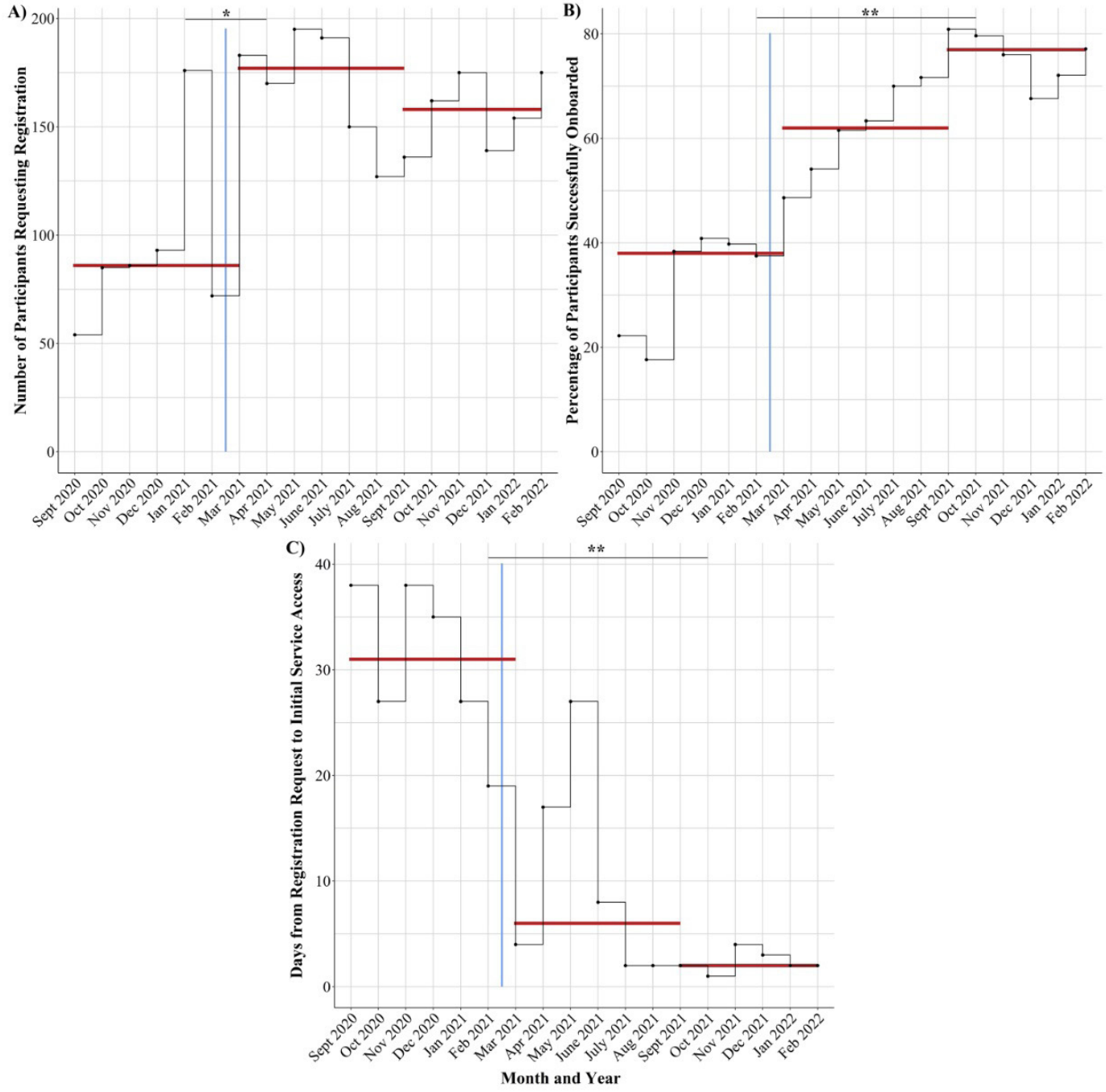

Figure 2 Run charts of the primary outcomes during the preimplementation and postimplementation periods. (A) The number of participants requesting registration, (B) the percentage of clients successfully onboarded and (C) the time (in days) from registration to initial service access. Blue vertical lines indicate the separation of the preimplementation and postimplementation periods, whereas the solid red horizontal lines represent the median value at sequential 6-month intervals. *p<0.05, **p<0.01 values indicate a significant Dunn's Multiple Comparisons Test with Bonferroni adjustments.

preimplementation period or postimplementation period (p>0.05) (figure 2A).

For successful onboarding of participants per month, a significantly smaller percentage of participants were onboarded in the preimplementation period compared with postimplementation period 2 (37.9, IQR 26.0–39.4 vs 76.6, IQR 73.1–79.0; p<0.01); in postimplementation period 1, the average was 62.4, (IQR 56.0–68.3), which was not significantly different from the other periods (p>0.05) (figure 2B). The median number of days from registration to initial service access before and after implementation were significantly different across the periods (p=0.002), with the preimplementation period being significantly higher than postimplementation period 2 (31 days, IQR 27.0–37.3 vs 2 days, IQR 2–2.75, p<0.01). Postimplementation period 1 (6, IQR 2.5–14.8) was not significantly different from the other periods (p>0.05) (figure 2C).

Table 2 Participant engagement with the Recovery Support Programme during the 12-month postimplementation

Quality measure	N	No of months	Median (IQR) per month
Completed action plans (%)	1330	12	99 (75–100)
Completed check-ins by active users*	584	12	2.6 (2.5–2.9)
Support session attendance	613	10†	23 (15–28)
Accessed Body Brave treatment services	394	12	30 (21–42)

*Active users defined as completing ≥1 check-in.
†Support sessions were introduced to the Recovery Support Programme in May 2021, 2 months following the initial implementation of the programme.

Secondary quality measures

Secondary quality measures focused on experiences with the platform and RSP components (table 2). Specifically, the RSP action plans included 7–9 tasks, and active RSP participants completed a median of 99% (IQR 75%–100%) of the available tasks per month. The system prompts weekly self-check-ins, and 584/1330 (44%) users completed at least one; active users completed a median of 2.6 check-ins (IQR 2.5–2.9) per month.

Over the course of the postimplementation period, Body Brave offered 28 support sessions (range, 1–4 per month), of which 12 were recovery sessions and 16 were workshops (online supplemental file 2). Overall, there were 613 attendees, median 23 attendees per session each month (table 2). Topic themes of recovery sessions included: goal setting, talking with support providers, such as loved ones and healthcare providers, and navigating common ED triggers. Workshops focused on treatment modalities like dialectical behaviour therapy, cognitive behavioural therapy and medical nutrition therapy. The most popular topics with ≥30 attendees were (1) body checking, (2) goal setting, (3) food and trauma from sexual violence, (4) coping with bad body image days and (5) thriving through the holidays.

During the postimplementation period, 394 participants who resided in Ontario completed a clinical intake appointment and were able to access more intensive treatments services (group and/or individual treatment) (table 2).

RSP feedback

Through the RSP, participants could optionally complete the user feedback survey; 138 of 1330 (10%) users responded. Of respondents, 106/133 (80%) agreed to strongly agreed that they felt more supported in their recovery journey, 97/134 (72%) gained insight to better address their ED/DE struggles, 81/123 (66%) gained insight to deal with challenges more effectively, 97/123 (79%) had a better understanding of the support services available, 34/44 (77%) felt more equipped to recognise signs and symptoms of ED/DE, 90/121 (74%) were hopeful toward their recovery journey, 82/121 (68%) felt empowered to make change; however, only 63/120 (53%) felt compassionate towards themselves (figure 3). Overall, 105/136 (77%) found the RSP helpful and 114/135 (85%) were satisfied with the programme (figure 3).

Additionally, text-based feedback to questions about aspects participants liked about the RSP and suggestions for improvements indicated that the RSP was well received. For example, participants indicated that the services offered were 'easy to access,' 'user-friendly,' and did 'not have long wait times.' Respondents further indicated that they enjoyed that the programme could be completed at their own pace and that they were provided with 'evidence-based' educational resources. Participants largely believed that the support sessions provided a sense of 'community and inclusion,' 'constant support' and 'connection to providers'; they could express how they felt 'without judgement,' felt heard by attendees, were 'not alone' in their struggles and were 'hopeful towards recovery' and their ability to 'establish new habits' to 'make permanent positive changes.'

There were some areas of the RSP that participants suggested could be improved. Some participants indicated that the platform was 'difficult to navigate,' 'complicated to use' and 'overwhelming' on initial use; however, these issues were mostly resolved with frequent usage. Some participants indicated that it would be beneficial to provide an instructional video on using the platform, including its purpose, essential functions and where to find relevant support programme information. Some errors were also indicated; some participants received multiple copies of an email or email reminders to complete check-ins while not enrolled in a service. Additional support services were also requested, as the 'time of day' for live sessions was challenging for some participants, given their schedules. Participants also suggested providing 'support on evenings and weekends' with drop-in hours.

DISCUSSION

Timely access to an appropriate level of care

The RSP was developed to deliver rapid, low-barrier support to those in need and to alleviate the rate-limiting step of initial assessment by a clinical staff member for each registrant, particularly since quick access to resources and self-management tools could meet the needs of a subset of users. Our results show an increase in the number of registration requests, particularly in the first 6 months postimplementation of the RSP; that over time, onboarding success increased (38% preimplementation

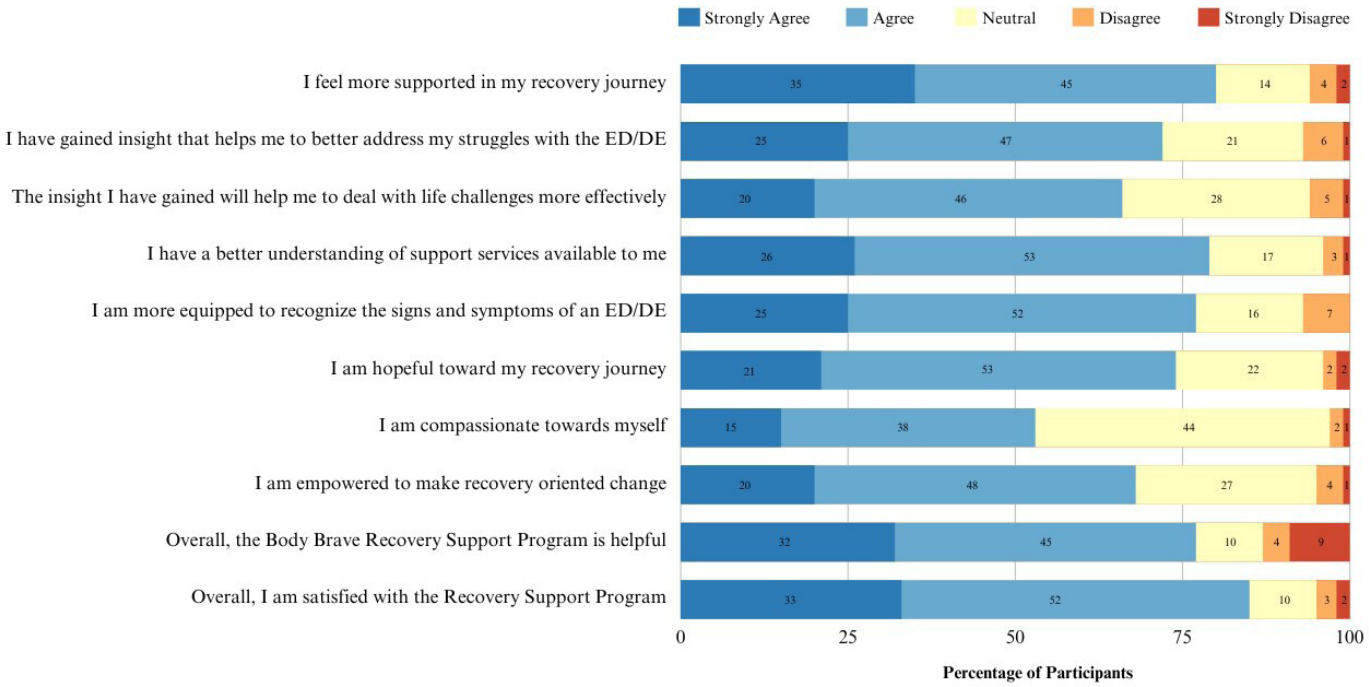

Figure 3 Responses to participant satisfaction survey for the Body Brave Recovery Support Programme. DE, disordered eating; ED, eating disorder.

vs 77% in postimplementation period 2); and the time to accessing supports was reduced. Six months before implementing the RSP, 165 Body Brave clients were registered, compared with 1330 in the 12 months after. By implementing the RSP, Body Brave could quickly scale support and resources to more people with ED/DE across Canada (with participants residing in nine provinces and one territory). It enabled participants to step-up intensity based on their individual needs.

Given that wait times for ED treatment have increased following the COVID-19 pandemic[16 17] and that longer wait times are negatively associated with remission post-treatment,[11] the significant decrease in time to access care postimplementation holds promise for patient recovery outcomes. The RSP improved access to health services, as defined by Levesque *et al*,[36] by creating an opportunity for users to identify their healthcare needs, seek or use healthcare services and receive treatment. In a stepped care model, evidence-based treatments start with lower-intensity interventions, such as self-help, that escalate to more intensive treatments (eg, personalised therapy, medications and specialist treatments), which have already demonstrated reductions in symptoms in people with anxiety.[24]

Group treatment programmes and one-on-one counselling were the primary mode of care available at Body Brave before implementing the RSP. In the 6-month preimplementation, about 37 people per month successfully completed the onboarding process required to access treatment. After implementation, that number was approximately 30 per month. The stepped-care RSP model continued to allow those with higher-intensity needs to access treatment groups while providing services to more than triple the number of clients.

Engagement with the RSP

The RSP proved engaging for participants, reflected in high task completion rates, frequent check-ins by active users and relatively high attendance at support sessions. Satisfaction with the RSP was overwhelmingly positive, with most users feeling more supported through their recovery and better equipped with skills to recognise and address their ED symptoms. Users also indicated having a better understanding of available supports, feeling empowered to make a change and feeling more hopeful toward recovery. All of these reflect that the RSP provided users with essential tools to facilitate recovery. However, it is worth noting that 66% of participants did not complete any check-ins, although those who did used them averaged 2.65 check-ins per month. Linardon *et al*[32] found that engagement with a similar online technology that used nudging features like reminders depends on timing, individual needs and contextual considerations. Some individuals perceive such reminders as supportive, using features such as affirmations for treatment adherence. In contrast, others find it unnecessary or triggering, particularly when their illness is highlighted during other activities like schoolwork.[32] The authors emphasise the importance of developing flexible platforms customised to individual preferences and treatment needs to enhance engagement and support for individuals with EDs. This is a good illustration of self-directed stepped-care engagement, but also an opportunity to understand the perspectives of users and nonusers and improve RSP engagement

through user experience research techniques (eg, codesign, usability testing) to improve the RSP platform as the programme iterates and evolves. To ensure the sustainability of the RSP, and the ability to evolve and expand the programme, funding for such programme and software development needs to be integrated into future healthcare spending.

Addressing barriers

Guided self-care is a recommended initial treatment for people with EDs.[41] Critical barriers to accessing care for ED/DE include access to care, stigma and shame, negative healthcare experiences, and a lack of awareness of available resources and treatments.[42] Online self-help programmes using a stepped-care approach can mitigate these barriers.[42]

The RSP at Body Brave addresses these barriers by offering low-barrier, no-cost, immediate support through a virtual platform designed to meet the diverse needs of individuals across the entire ED recovery continuum (eg, early intervention, waiting to access treatment, post-treatment). The RSP also aims to reduce stigma and shame associated with EDs and DE, improve self-compassion and self-care, and increase health literacy through the resources and support sessions, all of which are previously associated with improvement in ED-related symptom interruption.[43 44]

Limitations

This study had several limitations, including low completion rates of demographic data, use of a non-validated user experience survey potentially decreasing generalisability of our findings, the absence of automated data tracking processes to measure outcomes related to service delivery and a lack of options for participants to provide feedback on attrition. Due to the rapid implementation and adaptation of the RSP to address evolving user and organisation needs during the COVID-19 pandemic, automated data tracking processes were not initially integrated. Therefore, manual data collection methods were used for primary measures, which may have introduced human error. To overcome these limitations and allow for further quality improvement of the RSP, an automated data collection process and dashboard has been implemented within the Careteam platform to systematically track RSP service delivery indicators and minimise potential errors in future evaluations.

While the initial feedback on the RSP was positive, it is essential to acknowledge that the study did not assess usability of the platform nor the impact of the RSP on clinical or patient-reported outcomes, and the tools used in the user experience survey (online supplemental file 3) have not yet been validated. The decision to use a non-validated survey to collect participant feedback was driven by the rapid need for programme implementation and the unavailability of concise, program-specific assessment measures.

Future study of the RSP

The data dashboard will allow for observation of user engagement patterns in real time. We plan to use these observations to conduct further quality improvement assessments; implementing and testing interventions selected to enhance the RSP through PDSA cycles. Future iterations of the RSP will integrate validated patient reported outcome measures, including the InsideOut Institute Screener (2018) designed to assess broad ED risk and symptomatology[45] and the Clinical Impairment Assessment (CIA, V.3.0)[46] to allow for evaluating the effect of the RSP on these measures over time. After the release of updated iterations of the RSP, usability testing, including user interviews and validated questionnaires (eg, Post-Study System Usability Questionnaire[47] will assess effectiveness, efficiency, satisfaction and learnability.[48]

We plan to conduct qualitative studies by interviewing RSP users to better understand their experience with the RSP and the platform, and to explore their reasons for engaging, or not, with the various with elements of the programme. The qualitative data will inform acceptability and usability of the RSP, identify additional areas for improvement (eg, motivations for using the action plans), and may provide insights into the role of low-barrier, stepped care, virtual ED support services, such as the RSP, within the continuum of available supports.

Body Brave is also exploring participatory design techniques such as codesign, to involve users with lived experience in shaping future iterations of the platform's features and functionalities.[22 49] Through these efforts, we aim to improve the functionalities and delivery of the RSP and build evidence for the RSP as an effective and scalable intervention for EDs. Given the challenges faced by the healthcare system in meeting the growing demand for mental health services, establishing an evidence base for low-barrier, cost-effective and scalable interventions for EDs and DE is crucial.

CONCLUSIONS

The RSP addresses a critical need within the Canadian healthcare system for low-barrier, rapidly accessible support for individuals impacted by ED and DE. In the short term, the RSP reduced time to access care by offering a stepped-care approach to meet the needs of individuals, particularly when initially seeking resources and support for an ED/DE or while waiting for or after discharge from more intensive treatment programmes. Users engaged with the programme's various components had high satisfaction levels and indicated potential improvements. Through the RSP, Body Brave effectively expanded its reach across Canada and increased capacity with minimal additional resources.

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Acknowledgements The authors wish to acknowledge the contributions of the following colleagues and volunteers at Body Brave: Sonia Kumar, Hannah Lang, and Dr Karen Trollope-Kumar. We would also like to thank Dr Rama Sreepada for her contributions to developing the study design and data analysis plan. Jean-Francois ('JF') Arseneau and Jeremy Smith, from Careteam Technologies, provided data reports.

Contributors MDW, JLS and CL participated in study design, data analysis and manuscript drafting and editing. MG participated in study design and manuscript editing. HH participated in manuscript drafting and editing. CL acts as guarantor for the study.

Funding This study received no external funding. Careteam provides subsidised access to their platform to Body Brave. MG holds a Michael Smith Health Research BC scholar award. MDW held a Mitacs Elevate postdoctoral fellowship supported by Careteam Technologies.

Competing interests MDW and MG were part of a Canada's Digital Technology Supercluster project led by industry partner Careteam Technologies; JLS is a Registered Dietician employed by Body Brave; CL is a member of the Board of Directors of Body Brave.

Patient and public involvement Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

Patient consent for publication Not applicable.

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement No data are available.

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