Internet-Delivered Cognitive Behavioural Therapy for Post-traumatic Stress Disorder or Acute Stress Disorder: Recommendation

Final Recommendation

- Ontario Health, based on guidance from the Ontario Health Technology Advisory Committee, recommends publicly funding internet-delivered cognitive behavioural therapy for adults with post-traumatic stress disorder

Rationale for the Recommendation

The Ontario Health Technology Advisory Committee reviewed the findings of the health technology assessment[1] and determined that internet-delivered cognitive behavioural therapy (iCBT) may improve symptoms associated with post-traumatic stress disorder (PTSD), including depression and anxiety, and improve the quality of life of people with symptoms of PTSD, although the evidence supporting these benefits is uncertain. There is also a lack of published evidence about the benefits and risks of using iCBT for adults with acute stress disorder (ASD). The committee acknowledged that while iCBT for PTSD may be cost-effective, there is uncertainty about this because of the uncertainty in the clinical evidence of benefit. They also acknowledged that, while there will be an incremental cost to the health care system to publicly fund iCBT for PTSD, the cost can be offset if the improvements in symptoms and quality of life are realized.

In making their recommendation, the committee took into consideration that the uncertainty in the evidence of benefit was driven by the large number of people who discontinued iCBT treatment in the studies. They also recognized that there are many factors which may contribute to continuing iCBT treatment and that treating PTSD often requires a multi-treatment approach. Committee members acknowledged that face-to-face CBT is an accepted evidence-based treatment for PTSD. The committee weighed in favour of publicly funding iCBT as a means of increasing equitable access, particularly in situations where people are unable to obtain face-to-face CBT or where wait times are lengthy. The committee also took into account the lived experience of patients with PTSD who value improved access to CBT treatment that they would otherwise have to wait a long time for or, in some cases, travel distances to access in person. Because of the paucity of evidence about iCBT to treat ASD, the

Public Comment: Held February 22 to March 14, 2021

committee chose not to make an explicit recommendation about funding iCBT for this condition. However, they recognize that some people with ASD at high risk of developing PTSD may benefit from iCBT.

The committee acknowledged that there is variation in the types of iCBT programs available and because of this the effectiveness of these programs may vary. The committee members suggest that Ontario Health's Mental Health and Addictions Centre of Excellence (Centre of Excellence) determine criteria for publicly funded iCBT programs. The committee further suggests that one criterion be that iCBT be guided by a regulated professional. The committee also supports that implementation of iCBT for PTSD be part of a pathway of care guided by the Centre of Excellence. Once the pathway and criterion for use of the technology is defined, a revised budget impact analysis could be prepared to allow for implementation monitoring to be more effective.

Decision Determinants for Internet-Delivered Cognitive Behavioural Therapy for Post-traumatic Stress Disorder or Acute Stress Disorder

Decision Criteria	Subcriteria	Decision Determinants Considerations
Overall clinical benefit How likely is the health technology/ intervention to result in high, moderate, or low overall benefit?	**Effectiveness** How effective is the health technology/intervention likely to be (taking into account any variability)?	No studies were identified that assessed iCBT for treatment of ASD or prevention of PTSD in people diagnosed with ASD. No studies that directly compared iCBT with face-to-face CBT for the treatment of PTSD were identified. For iCBT compared with wait list (people waiting for iCBT) or usual care (people without active CBT): • iCBT may improve PTSD symptoms, but the evidence is very uncertain (GRADE: Very low) • iCBT may improve depression or anxiety symptoms associated with PTSD or quality of life, but the evidence is very uncertain (GRADE: Very low) • The evidence suggests iCBT results in a slight increase in dropout rates (patients who discontinued treatment, withdrew from study, or were lost to follow-up) (GRADE: Low) • iCBT may have little to no effect on post-treatment diagnosis of PTSD (that is, the diagnosis persists after treatment), but the evidence is very uncertain (GRADE: Very low) For iCBT compared with non–CBT internet-delivered interventions: • iCBT may have little to no effect on PTSD symptoms, on dropout rates, or on depression and anxiety symptoms associated with PTSD, but the evidence is very uncertain (GRADE: Very low)
	Safety How safe is the health technology/intervention likely to be?	No data were reported on adverse events.
	Burden of illness What is the likely size of the burden of illness pertaining to	The percentage of adults in Canada who may experience PTSD in their lifetime (adult lifetime prevalence) is estimated at 9.2%. The percentage of people with ASD at any one

Decision Criteria	Subcriteria	Decision Determinants Considerations
	this health technology/ intervention?	time point (point prevalence) is estimated to range from 5% to 20%, depending on nature and severity of trauma.
	Need How large is the need for this health technology/ intervention?	Barriers to face-to-face CBT include timely access (e.g., there is a long wait time to access publicly funded CBT), cost (e.g., there is an out-of-pocket cost for people to access non–publicly funded nonphysician providers), and geography (e.g., face-to-face individual or group CBT may not be readily accessible in remote and rural areas of Ontario).
Patient preferences and values How likely is adoption of the health technology/intervention to be congruent with patient preferences and values and with ethical or legal standards?	**Patient preferences and values** Do patients have specific preferences, values, or needs related to the health condition, health technology/intervention, or life impact that are relevant to this assessment? (Note: The preferences and values of family members and informal caregivers are to be considered as appropriate.)	Patients reported a preference for having an iCBT option due to the long wait times for in-person services and the ongoing support needed to manage PTSD. Patients also raised the importance of online therapy being combined with face-to-face sessions.
	Autonomy, privacy, confidentiality, and/or other relevant ethical principles as applicable Are there concerns regarding accepted ethical or legal standards related to patient autonomy, privacy, confidentiality, or other ethical principles that are relevant to this assessment? (Note: The preferences and values of the public are to be considered as appropriate.)	Providing choice of different treatment options for PTSD leads to increased autonomy. Standard privacy and confidentiality protocols must occur due to the stigmatizing nature of PTSD.
Equity and patient care How could the health technology/ intervention affect equity of access and coordination of patient care?	**Equity of access or outcomes** Are there disadvantaged populations or populations in need whose access to care or health outcomes might be improved or worsened that are relevant to this assessment?	iCBT may remove access barriers faced by some patients seeking CBT for PTSD, (e.g., stigma, geographical barriers, scheduling and transportation costs to attend in-person appointments). However, people who are not comfortable with technology or who have limited access to a current device or internet services may not be ideal candidates for iCBT.

Decision Criteria	Subcriteria	Decision Determinants Considerations
	Patient care Are there challenges in the coordination of care for patients or other system-level aspects of patient care (e.g., timeliness of care, care setting) that might be improved or worsened that are relevant to this assessment?	Coordination of care for patients may be improved by reduction of access barriers (e.g., eliminating need to organize transportation to in-person appointments).
Cost-effectiveness How efficient is the health technology/ intervention likely to be?	**Economic evaluation** How efficient is the health technology/ intervention likely to be?	We did not conduct a primary economic evaluation of iCBT for the treatment of adults with PTSD or ASD. However, results from one directly applicable Canadian cost–utility analysis suggested that iCBT may be cost-effective and less costly compared with usual care (people without active iCBT) over 1-y and lifetime time horizons, respectively. Furthermore, guided iCBT provided by regulated, registered nonphysician therapists represented an economically attractive option compared with no active iCBT treatment.[2] Nevertheless, there is uncertainty about the cost-effectiveness because of the uncertainty in the evidence of clinical benefit.
Feasibility of adoption into health system How feasible is it to adopt the health technology/intervention into the Ontario health care system?	**Economic feasibility** How economically feasible is the health technology/intervention?	The cost of the iCBT program for PTSD or ASD was estimated to be about $250 per person annually. The estimated annual budget impact of publicly funding iCBT for PTSD or ASD in Ontario over the next 5 y ranges from an additional $2.43 million in Y1 to $2.37 million in Y5. Considering solely the treatment costs related to iCBT, the annual budget impact ranges from an additional $3.37 million in Y1 to $17.84 million in Y5.
	Organizational feasibility How organizationally feasible is it to implement the health technology/ intervention?	Before May 5, 2020, iCBT for PTSD/ASD was not publicly funded in Ontario. On May 5, 2020, iCBT was publicly funded for PTSD/ASD by some providers during the COVID-19 pandemic. The Ontario Ministry of Health is planning how best to deliver iCBT for PTSD and other mental health conditions as part of a provincial structured program.

Abbreviations: ASD, acute stress disorder; CBT, cognitive behavioural therapy; GRADE, Grading of Recommendations Assessment, Development, and Evaluation; iCBT, internet-delivered cognitive behavioural therapy; PTSD, post-traumatic stress disorder; y, year(s).

References

(1) Ontario Health. Internet-delivered cognitive behavioural therapy for post-traumatic stress disorder or acute stress disorder: a health technology assessment. Ont Health Technol Assess Ser [Internet]. 2021 June;21(9):1–120. Available from: https://www.hqontario.ca/evidence-to-improve-care/health-technology-assessment/reviews-and-recommendations/internet-delivered-cbt-for-ptsd-or-asd

(2) Canadian Agency for Drugs and Technologies in Health. Internet-delivered cognitive behavioural therapy for post-traumatic stress disorder: a health technology assessment (CADTH Optimal Use Report; vol. 9, no. 3b). Ottawa: The Agency; 2019 Dec.

Disclaimer

About Ontario Health

About the Ontario Health Technology Advisory Committee

How to Obtain Recommendation Reports

Ontario Health
130 Bloor Street West, 10th Floor
Toronto, Ontario
M5S 1N5
Tel: 416-323-6868
Toll Free: 1-866-623-6868
Fax: 416-323-9261
Email: oh-hqo_hta@ontariohealth.ca
www.hqontario.ca

ISBN 978-1-4868-5324-3 (PDF)

Citation

Ontario Health. Internet-delivered cognitive behavioural therapy for post-traumatic stress disorder or acute stress disorder: recommendation [Internet]. Toronto (ON): Queen's Printer for Ontario; 2021 June. 6 pp. Available from: https://www.hqontario.ca/evidence-to-improve-care/health-technology-assessment/reviews-and-recommendations/internet-delivered-cbt-for-ptsd-or-asd