

**CADTH Reference List** 

# Mental Wellness Interventions for Indigenous Peoples

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# **Key Messages**

- We found 1 randomized controlled trial and 3 non-randomized studies about the clinical effectiveness of mental wellness interventions versus no treatment for Indigenous Peoples living in Canada, the US, Australia, New Zealand, and the North Circumpolar Region.
- We found 1 systematic review, 5 randomized controlled trials, and 3 non-randomized studies about the clinical effectiveness of different types of mental wellness interventions for Indigenous Peoples living in Canada, the US, Australia, New Zealand, and the North Circumpolar Region.
- We did not find any studies on the cost-effectiveness of mental wellness interventions for Indigenous Peoples living in Canada, the US, Australia, New Zealand, and the North Circumpolar Region.

# **Research Questions**

- 1. What is the clinical effectiveness of mental wellness interventions versus no treatment for Indigenous Peoples living in Canada, the US, Australia, New Zealand, and the North Circumpolar Region?
- 2. What is the clinical effectiveness of different types of mental wellness interventions for Indigenous Peoples living in Canada, the US, Australia, New Zealand, and the North Circumpolar Region?
- 3. What is the cost-effectiveness of mental wellness interventions for Indigenous Peoples living in Canada, the US, Australia, New Zealand, and the North Circumpolar Region?

# Methods

## **Literature Search Methods**

A limited literature search was conducted by an information specialist on key resources including MEDLINE, the Cochrane Database of Systematic Reviews, the international HTA database, the websites of Canadian and major international health technology agencies, as well as a focused internet search. The search strategy comprised both controlled vocabulary, such as the National Library of Medicine's MeSH (Medical Subject Headings), and keywords. The main search concepts were Indigenous Peoples living in Canada, the US, Australia, New Zealand, and the North Circumpolar Region, and mental wellness interventions. CADTH-developed search filters were applied to limit retrieval to health technology assessments, systematic reviews, meta-analyses, network meta-analyses, any types of clinical trials or observational studies, or economic studies. Where possible, retrieval was limited to humans. The search was also limited to English-language documents published between January 1, 2018, and December 9, 2022. Internet links were provided, where available.

One reviewer screened literature search results (titles and abstracts) and selected publications according to the inclusion criteria presented in <u>Table 1</u>. Full texts of study publications were not reviewed.



**Table 1: Selection Criteria** 

Criteria	Description
Population	Indigenous Peoples living in Canada, the US, Australia, New Zealand, and the North Circumpolar Region
Intervention	Mental wellness interventions, including culturally safe interventions and traditional healing practices (e.g., land-based practices)
Comparator	Q1 and Q3: No treatment with mental wellness interventions
	Q2 and Q3: Alternative mental wellness interventions
Outcomes	Q1 and Q2: Clinical benefits (e.g., psychological symptoms, quality of life, satisfaction with care) and harms (e.g., adverse events)
	Q3: Cost-effectiveness (e.g., cost per quality-adjusted life-year gained, incremental cost-effectiveness ratio)
Study designs	Health technology assessments, systematic reviews, randomized controlled trials, non-randomized studies, economic evaluations

# Results

Thirteen relevant references were identified for this report. 1-13 One randomized controlled trial and 3 non-randomized studies 9,9,13 were identified about the clinical effectiveness of mental wellness interventions versus no treatment for Indigenous Peoples living in Canada, the US, Australia, New Zealand, and the North Circumpolar Region. One systematic review, 5 randomized controlled trials, 2-6 and 3 non-randomized studies 10-12 were identified about the clinical effectiveness of different types of mental wellness interventions for Indigenous Peoples living in Canada, the US, Australia, New Zealand, and the North Circumpolar Region. No relevant health technology assessments or economic evaluations were identified. This report was based on studies identified in published literature and did not include knowledge disseminated in oral traditions or other ways.

Additional references of potential interest that did not meet the inclusion criteria are provided in <u>Appendix 1</u>.



# References

## Health Technology Assessments

No literature identified.

## Systematic Reviews

1. Purcell-Khodr GC, Lee KSK, Conigrave JH, Webster E, Conigrave KM. What can primary care services do to help First Nations people with unhealthy alcohol use? A systematic review: Australia, New Zealand, USA and Canada. Addict Sci Clin Pract. 2020;15(1):31. PubMed

## Randomized Controlled Trials

- 2. Craig Rushing S, Kelley A, Bull S, et al. Efficacy of an mhealth intervention (BRAVE) to promote mental wellness for American Indian and Alaska native teenagers and young adults: Randomized controlled trial. *JMIR Ment Health*. 2021;8(9):e26158. PubMed
- 3. McDonell MG, Hirchak KA, Herron J, et al. Effect of incentives for alcohol abstinence in partnership with 3 American Indian and Alaska Native communities: A randomized clinical trial. *JAMA Psychiatry*. 2021;78(6):599-606. PubMed
- 4. Venner KL, Serier K, Sarafin R, et al. Culturally tailored evidence-based substance use disorder treatments are efficacious with an American Indian Southwest tribe: An open-label pilot-feasibility randomized controlled trial. Addiction. 2021;116(4):949-960. PubMed
- 5. Brave Heart MYH, Chase J, Myers O, et al. Iwankapiya American Indian pilot clinical trial: Historical trauma and group interpersonal psychotherapy. *Psychotherapy*. 2020;57(2):184-196. PubMed
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- Pearson CR, Kaysen D, Huh D, Bedard-Gilligan M. Randomized control trial of culturally adapted cognitive processing therapy for PTSD substance misuse and HIV sexual risk behavior for Native American women. AIDS Behav. 2019;23(3):695-706. PubMed

#### Non-Randomized Studies

- 8. Morin KA, Marsh TN, Eshakakogan C, et al. Community trial evaluating the integration of Indigenous healing practices and a harm reduction approach with principles of seeking safety in an Indigenous residential treatment program in Northern Ontario. BMC Health Serv Res. 2022;22(1):1045. PubMed
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- 11. Sveticic J, Turner K, Bethi S, et al. Short stay unit for patients in acute mental health crisis: A case-control study of readmission rates. Asia Pac Psychiatry. 2020;12(1):e12376. PubMed
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- 13. Kelley A, Fatupaito B, Witzel M. Is culturally based prevention effective? Results from a 3-year tribal substance use prevention program. *Eval Program Plann*. 2018;71:28-35. PubMed

#### **Economic Evaluations**

No literature identified.



# **Appendix 1: References of Potential Interest**

#### **Previous CADTH Reports**

Ndegwa S, MacDougall D. Healthy aging interventions, programs, and initiatives. (CADTH Environmental scan no. 92). Ottawa (ON): CADTH; 2021: https://www.cadth.ca/healthy-aging-interventions-programs-and-initiatives-environmental-scan. Accessed 2022 December 14.

Internet-delivered cognitive behavioural therapy for post-traumatic stress disorder: A health technology assessment. (CADTH optimal use report vol.9, no.3b). Ottawa (ON):CADTH; 2020: https://www.cadth.ca/internet-delivered-cognitive-behavioural-therapy-post-traumatic-stress-disorder-health-technology. Accessed 2022 December 14.

## Systematic Reviews

#### Unclear Comparator

Fatima Y, Liu Y, Cleary A, et al. Connecting the health of country with the health of people: Application of "caring for country" in improving the social and emotional well-being of Indigenous people in Australia and New Zealand. Lancet Reg Health West Pac. 2023;31:100648. PubMed

English M, Wallace L, Evans J, Diamond S, Caperchione CM. The impact of sport and physical activity programs on the mental health and social and emotional wellbeing of young Aboriginal and Torres Strait Islander Australians: A systematic review. *Prev Med Rep.* 2022;25:101676. PubMed

Grande AJ, Elia C, Peixoto C, et al. Mental health interventions for suicide prevention among indigenous adolescents: A systematic review. Sao Paulo Med J. 2022;140(3):486-498. PubMed

Lee RS, Brown HK, Salih S, Benoit AC. Systematic review of Indigenous involvement and content in mental health interventions and their effectiveness for Indigenous populations. *Aust N Z J Psychiatry*. 2022;56(10):1230-1251. PubMed

Graham S, Stelkia K, Wieman C, Adams E. Mental health interventions for First Nations, Inuit, and Métis Peoples in Canada: A systematic review. *Int Indig Policy J.* 2021;12(2):10820. https://ojs.lib.uwo.ca/index.php/iipj/article/view/10820. Accessed 2022 December 14.

Shochet IM, Orr JA, Kelly RL, Wurfl AM, Saggers BR, Carrington SB. Psychosocial resources developed and trialled for Indigenous people with autism spectrum disorder and their caregivers: A systematic review and catalogue. Int J Equity Health. 2020;19(1):134. PubMed

Snijder M, Stapinski L, Lees B, et al. Preventing substance use among Indigenous adolescents in the USA, Canada, Australia and New Zealand: A systematic review of the literature. *Prev Sci.* 2020;21(1):65-85. PubMed

Perdacher E, Kavanagh D, Sheffield J. Well-being and mental health interventions for Indigenous people in prison: Systematic review. BJPsych Open. 2019;5(6):e95. PubMed

#### No Comparator

WorkSafeBC Evidence-Based Practice Group, Martin CW. Sweat lodge usage as treatment for depression or other psychological disorders. Richmond (BC): WorkSafeBC Evidence-Based Practice Group; 2022: <a href="https://www.worksafebc.com/en/resources/health-care-providers/guides/sweat-lodge-usage-treatment-depression-other-psychological-disorders">https://www.worksafebc.com/en/resources/health-care-providers/guides/sweat-lodge-usage-treatment-depression-other-psychological-disorders</a> Accessed 2022 December 14.

Dawson AZ, Walker RJ, Campbell JA, Davidson TM, Egede LE. Telehealth and indigenous populations around the world: A systematic review on current modalities for physical and mental health. Mhealth. 2020;6:30. PubMed

#### Randomized Controlled Trials

## Alternative Outcome - Service Provision

Dzidowska M, Lee KSK, Conigrave JH, et al. Support for Aboriginal health services in reducing harms from alcohol: 2-year service provision outcomes in a cluster randomized trial. Addiction. 2022;117(3):796-803. PubMed

#### Non-Randomized Studies

#### Mixed Population

Kelly PJ, Coyte J, Robinson LD, et al. Evaluating an Aboriginal community controlled residential alcohol and other drug services: Use of benchmarking to examine within treatment changes in wellbeing. *Drug Alcohol Rev.* 2022;41(4):953-962. PubMed

# Before-and-After Studies

Chambers RA, Patel H, Richards J, et al. Feasibility, acceptability, and preliminary impact of Asdzaan Be'eena: An intergenerational, strength-based, and culturally grounded program to improve the health of Navajo families. Fam Community Health. 2021;44(4):266-281. PubMed

Kelley A, Steinberg R, McCoy TP, Pack R, Pepion L. Exploring recovery: Findings from a six-year evaluation of an American Indian peer recovery support program. *Drug Alcohol Depend*. 2021;221:108559. PubMed

Calabria B, Shakeshaft AP, Clifford A, et al. Reducing drug and alcohol use and improving well-being for Indigenous and non-Indigenous Australians using the Community Reinforcement Approach: A feasibility and acceptability study. Int J Psychol. 2020;55(Suppl 1):88-95. PubMed

Hale JW, Lewis C, Nazir N, et al. One-time education sessions to help American Indian smokeless tobacco users quit. J Community Health. 2020;45(3):526-533. PubMed



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- Riley BJ, Smith D, Baigent MF. Mindfulness and acceptance-based group therapy: An uncontrolled pragmatic pre-post pilot study in a heterogeneous population of female prisoners. Int J Offender Ther Comp Criminol. 2019;63(15-16):2572-2585. PubMed
- Tu D, Hadjipavlou G, Dehoney J, et al. Partnering with Indigenous Elders in primary care improves mental health outcomes of inner-city Indigenous patients: Prospective cohort study. Can Fam Physician. 2019;65(4):274-281. PubMed

#### Alternative Comparator

- Bowen DJ, Powers DM, Russo J, et al. Implementing collaborative care to reduce depression for rural Native American/Alaska Native people. *BMC Health Serv Res.* 2020;20(1):34. PubMed
- Titov N, Schofield C, Staples L, Dear BF, Nielssen O. A comparison of Indigenous and non-Indigenous users of MindSpot: An Australian digital mental health service. Australas Psychiatry. 2019;27(4):352-357. PubMed

## **Review Articles**

- Haig L, Skinner K. Use of equine-assisted services to improve outcomes among at-risk and Indigenous Youth: A scoping review. Front Public Health. 2022;10:730644. PubMed
- Ineese-Nash N, Stein M, Patel K. Wiingushk Okaadenige (Sweetgrass Braid): A braided approach to Indigenous youth mental health support during COVID-19. Int J Indig Health. 2022;17(1):36721. https://ips.library.utoronto.ca/index.php/iiih/article/view/36721. Accessed 2022 December 15.
- Okpalauwaekwe U, Ballantyne C, Tunison S, Ramsden VR. Enhancing health and wellness by, for and with Indigenous youth in Canada: A scoping review. BMC Public Health. 2022;22(1):1630. PubMed
- Priest S. Land-based healing through adventure: Wise practices from Indigenous Peoples. Int J Indig Health. 2022;17(2):36754. https://jps.library.utoronto.ca/index.php/ijih/article/view/36754. Accessed 2022 December 15.
- Wells CC, White L, Schmidt T, et al. Adapting PC CARES to continue suicide prevention in rural Alaska during the COVID-19 pandemic: Narrative overview of an in-person community-based suicide prevention program moving online. Am Indian Alsk Native Ment Health Res. 2022;29(2):126-154. PubMed
- Gupta H, Tari-Keresztes N, Stephens D, Smith JA, Sultan E, Lloyd S. A scoping review about social and emotional wellbeing programs and services targeting Aboriginal and Torres Strait Islander young people in Australia: Understanding the principles guiding promising practice. BMC Public Health. 2020;20(1):1625. PubMed
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- Elman A, Etter M, Fairman K, Chatwood S. Mental health services in the Northwest Territories: A scoping review. Int J Circumpolar Health. 2019;78(1):1629783. PubMed
- Kilian A, Williamson A. What is known about pathways to mental health care for Australian Aboriginal young people?: A narrative review. Int J Equity Health. 2018;17(1):12. PubMed

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#### Qualitative Studies

- Chartier MJ, Phanlouvong A, Weenusk J, et al. Evaluating the strengths and challenges of PAX dream makers approach to mental health promotion: Perspectives of youth and community members in Indigenous communities in Manitoba, Canada. Int J Circumpolar Health. 2022;81(1):2089378. PubMed
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- Lund JI, Mushquash CJ, Carty H, et al. Implementing Indigenous youth peer mentorship: Insights from the By Youth For Youth Project. Int J Indig Health. 2022;17(1):36491. https://jps.library.utoronto.ca/index.php/ijih/article/view/36491. Accessed 2022 December 15.
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