Bridging Medicine and Reconciliation: Decolonizing Obesity Care and Expanding Access to GLP-1 Therapy for Indigenous Peoples in Canada

Beth Neilson, *RN, BSN, MN:NP Candidate*
Thompson Rivers University

Dr. Lisa Creelman, *NP(F), MScN, DNP*
Thompson Rivers University

Sheila Blackstock, *RN, BScN, MScN, COHN, FCNEI, PhD*
Thompson Rivers University

ABSTRACT

Obesity is one of the most pressing health challenges in Canada, driving the rise of type 2 diabetes, cardiovascular disease, cancer, and premature mortality. While lifestyle interventions remain the cornerstone of obesity management, many individuals require pharmacotherapy and/or bariatric surgery to achieve sustained benefits. Among recent advances, glucagon-like peptide-1 (GLP-1) and dual glucagon-like peptide-1 and glucose-dependent insulinotropic polypeptide (GLP-1/GIP) receptor agonists have demonstrated unprecedented efficacy in weight reduction and cardiometabolic risk improvement.

For Indigenous peoples in Canada, the burden of obesity is not only medical but deeply rooted in colonial legacies. Systemic inequities, intergenerational trauma, disrupted food systems, and racism in healthcare have contributed to disproportionately high rates of obesity and related chronic illnesses. The authors evaluate the efficacy of GLP-1 pharmacotherapy, analyze policy and systemic barriers that constrain access, and highlight the essential role of primary care providers in delivering culturally safe, trauma-informed, and community-centred care. By situating biomedical advances within the context of reconciliation, the authors argue that equitable access and culturally grounded approaches are essential to achieving meaningful improvements in obesity care for Indigenous peoples in British Columbia (BC) and across Canada.

This policy review employed a multi-faceted approach to examine the intersection of obesity management and health equity among Indigenous populations in Canada. The objectives were to identify available and publicly funded obesity treatments in BC and to explore the root causes of obesity and related health inequities among Indigenous peoples. First, an environmental scan of the BC health landscape was conducted, including an analysis of the BC Guidelines for Obesity Management and coverage available under the Medical Services Plan (MSP) and PharmaCare. Second, a literature review synthesized findings from scoping reviews and white papers addressing Indigenous health disparities. Finally, a focused literature review evaluated the clinical outcomes of GLP-1 pharmacotherapy for weight management in non-diabetic populations, with the specific search strategies and methods outlined within this paper.

Key Themes: The authors found several key themes in review of the literature, including: the enduring legacy of colonization and its impact on Indigenous health outcomes, systemic barriers to GLP-1/GIP access for Indigenous populations, culturally safe and trauma-informed approaches to obesity care, and recommendations for equitable access and culturally safe care. The authors conclude with a call to action to change policies on GLP-1/GIP medication coverages for First Nations that align with the social determinants of health.

Keywords: obesity management; GLP-1 receptor agonists; Indigenous health; health equity; nurse practitioners; primary care

Obesity and its Health Consequences

The health consequences of obesity are extensive and severe: obesity is strongly associated with the development and progression of numerous chronic conditions, including type 2 diabetes, cardiovascular disease, various cancers, hepatic and gallbladder disorders, arthritis, significant mental health challenges, and premature mortality.[1] While once considered a lifestyle disease,[2,3] obesity is now considered a complex, chronic medical disease, as officially recognized by the World Health Organization[4] and Canadian Medical Association.[2] This critical recognition aims to shift societal perspectives away from viewing obesity as a lifestyle choice towards acknowledging the complex psychological and physiological mechanisms underlying the condition.[2] Further, viewing obesity as a chronic disease can contribute to reducing stigma and enhancing access to appropriate and effective interventions.[3,5,6] Effective management of obesity typically begins with comprehensive lifestyle modifications, including a reduced calorie diet, increased physical activity, and behavioural support.[7] For many individuals, however, these interventions alone are not sufficient to achieve sustained weight loss.[8] In such cases, bariatric surgery, which is covered by BC's Medical Services Plan for adults with a BMI ≥40 kg/m^2 or ≥35 kg/m^2 with comorbidities,[9] may be recommended. Further, the sole or adjunct use of pharmacotherapy, as discussed below, may be required to support long-term weight loss outcomes.[10,11]

Despite advances in obesity treatment, equitable access to effective care remains limited across Canada, particularly for Indigenous peoples. This manuscript examines how historical and systemic inequities continue to shape treatment availability and outcomes, focusing on GLP-1 pharmacotherapy access and the integration of culturally safe, trauma-informed, and community-centred approaches to obesity care.

GLP-1/GIP Medications: Efficacy, Safety, and Access Considerations

A focused literature search was performed to evaluate the clinical outcomes of glucagon-like peptide-1 (GLP-1) and dual glucagon-like peptide-1 and glucose-dependent insulinotropic polypeptide (GLP-1/GIP) agonist medications in non-diabetic individuals. Although GLP-1 medications were originally approved for the treatment of type 2 diabetes over two decades ago,[12] recent evidence has shifted the focus toward their efficacy for weight loss and cardiovascular benefits.[11,13]

Search Strategy

A focused literature search was conducted on the CINAHL and MEDLINE databases. The databases were searched using the following key terms: *GLP1, GLP1RA, GIP, overweight, obesity, obese, health outcomes*, and the exclusion term. Full text, English, peer reviewed papers were included. The application of these search criteria yielded 43 results. Exclusion criteria included duplication of studies, incorrect intervention, and incorrect patient population. See Figure 1.

Findings

Mechanism of Action and Clinical Efficacy

GLP-1 and GIP are incretin hormones naturally secreted by the gut in response to nutrient intake.[12] Their primary physiological role involves stimulating insulin secretion in a glucose-dependent manner.[12] GLP-1 receptor agonists (GLP-1RAs), such as semaglutide, and dual GIP/GLP-1RAs, such as tirzepatide, harness these endogenous pathways to facilitate weight management and improve metabolic health.[12]

Clinical trials consistently demonstrate the remarkable efficacy of these medications for weight management. For instance, the STEP-1 trial, a randomized control trial involving 1,961 patients across 16 countries, including Canada, with BMI ≥27 kg/m^2 but without diabetes, demonstrated that semaglutide 2.4mg weekly injections resulted in an average body weight reduction of 14.9% over 68 weeks, compared to a mere 2.4% reduction in the placebo group, with both groups receiving concurrent lifestyle interventions.[8] Tirzepatide, a dual GLP-1/GIP agonist, exhibits even greater efficacy for weight reduction.[14] The SURMOUNT-5 trial, a head-to-head double-blind randomized control trial with patients in the United States and Puerto Rico, demonstrated that tirzepatide led to significantly greater weight loss than semaglutide over 72 weeks in obese patients without diabetes.[14] On average, participants receiving tirzepatide experienced a 20% reduction in body weight, in contrast to 13% for those in the semaglutide group.[14]

Beyond their direct effects on weight, GLP-1RAs contribute to metabolic stabilization, improved lipid profiles, and a significant reduction in cardiovascular risks and events.[13] The SELECT trial, which enrolled over 17,000 patients across 41 countries including Canada with overweight or obesity and pre-existing cardiovascular disease but without diabetes, reported that semaglutide 2.4mg/week reduced all-cause mortality by nearly 20% over 40 months.[13] Furthermore, emerging evidence suggests that these medications may act as anti-consumption agents by modulating the brain's reward pathways,[15] potentially mitigating cravings not just for unhealthy foods but also alcohol, nicotine, and recreational drugs.[15,16]

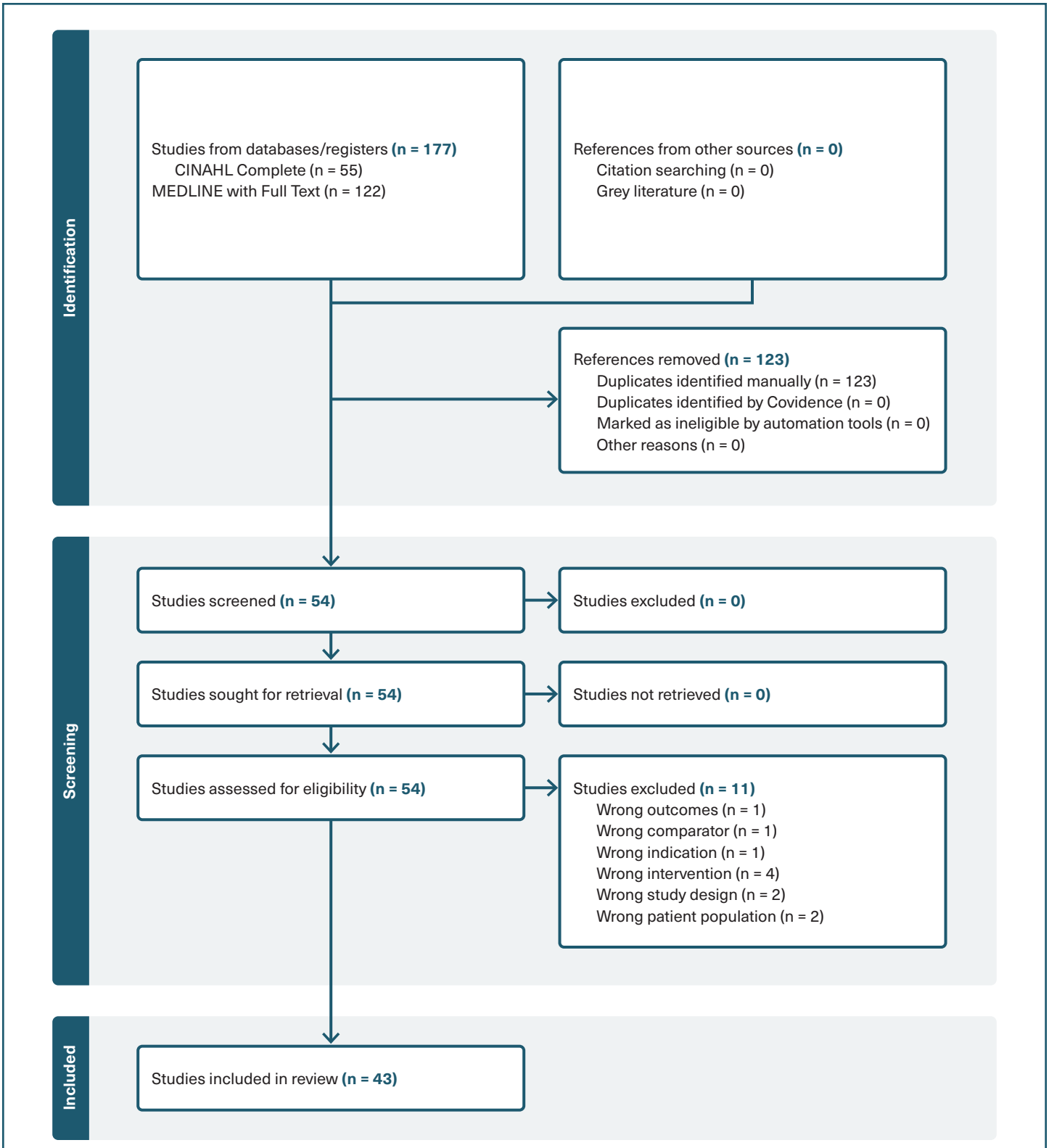

Figure 1. PRISMA flow diagram of study selection

Recent Canadian Clinical Practice Guideline Updates

The authors of the 2025 pharmacotherapy update to the Canadian Obesity Management Guidelines recommend that GLP-1/GIP medications, in conjunction with health behaviour changes, be offered not only to people with BMI ≥27 kg/m^2 and type 2 diabetes (Level 1A, grade A)[11] and/or established atherosclerotic cardiovascular disease (Level 2A; grade B),[11] but also for a range of other adiposity-related complications (Level 1A; grade A).[11] Conditions that are recommended for first-line GLP-1/GIP

therapy, alongside lifestyle interventions, include prediabetes, heart failure with persevered ejection fraction, obstructive sleep apnea, metabolic dysfunction-associated steatohepatitis (MASLD), and osteoarthritis when BMI thresholds are met.[11] The guidelines emphasize that pharmacotherapy should be continued long-term, as discontinuation of these medications often results in weight regain and loss of health benefits, regardless of ongoing lifestyle interventions.[11] These broadened indications reinforce the clinical and therapeutic rationale for expanding access to GLP-1/GIP medications across a wider spectrum of obesity-related conditions.

Cost Considerations in Canada

In Canada, the cost of GLP-1/GIP medications represents a substantial barrier for many individuals. A monthly supply of subcutaneous semaglutide typically ranges from $200-460 CAD for uninsured patients, while subcutaneous tirzepatide can cost between $400-840 CAD per month, depending on dose required.[17] BC's PharmaCare program covers injectable semaglutide 1.0mg for eligible individuals with type 2 diabetes, contingent upon inadequate glycemic control with metformin.[18] Crucially, BC PharmaCare does not cover any GLP-1/GIP medication for obesity in the absence of type 2 diabetes.[18] However, private or employer-sponsored health plans may offer more comprehensive coverage, thereby creating fragmented and two-tiered access for British Columbians. Indigenous peoples, specifically, often face a challenge with Pharmacare's Plan W, which only provides limited coverage for these medications for the treatment of type 2 diabetes.[18,19] This disparity in coverage restricts access to effective treatments for obesity, a condition that disproportionately affects Indigenous populations in Canada.[20]

The Enduring Legacy of Colonization and its Impact on Indigenous Health Outcomes

The health inequities experienced by Indigenous peoples in Canada are a persistent and deeply troubling reality. Indigenous individuals face earlier death and a higher incidence and severity of disease compared to their non-Indigenous counterparts.[21] This disparity is not a historical relic but an ongoing consequence of settler colonialism, which functions as an enduring structure rather than a past event.[22] The systemic policies implemented to assimilate Indigenous peoples, most notably the Residential School System and the Indian Act, have caused profound intergenerational trauma, fractured cultural continuity, and have detrimentally shaped health outcomes across multiple generations.[23] This historical oppression has directly contributed to the disproportionately high rates of chronic illnesses, including obesity, type 2 diabetes, hypertension, substance abuse, and mental health crises.[23]

The prevalence of obesity among Indigenous adults in Canada is markedly higher than among non-Indigenous adults.[24] Specifically, obesity rates are 1.6 times higher for First Nations individuals living off reserve and for Inuit populations, and 1.4 times higher for Metis individuals.[25] It is imperative to recognize that obesity in Indigenous populations is a clear manifestation of systemic inequity.[20] Further, it is essential to note that systemic racism within the healthcare system causes many Indigenous patients to avoid seeking care altogether, thus deepening the divide of health inequities experienced by Indigenous Canadians.[26]

Systemic Barriers to GLP-1/GIP Access for Indigenous Populations

Policy Barriers: Navigating Plan W Coverage

Access to GLP-1/GIP medications for Indigenous peoples in BC is constrained by financial barriers. First Nations Health Authority (FNHA)'s Plan W is designed to cover 100% of eligible prescription costs, along with certain medical supplies and over-the-counter medications, for registered First Nations with active Medical Services Plan coverage.[27] This comprehensive coverage is intended to alleviate financial burdens for Indigenous people.[27] However, at the time of writing, no GLP-1/GIP medications are covered through Plan W for obesity treatment alone.[27]

Some Indigenous health care systems, such as the Indian Health Service in the United States, have established explicit criteria for covering GLP-1/GIP agonists for weight loss,[28] in response to evidence-based obesity treatment recommendations. In contrast, these clear guidelines for obesity management are not currently available through Pharmacare's Plan W.[27] This represents a significant policy gap, compelling patients to either incur out-of-pocket costs or forgo treatment. This situation creates a profound two-tiered system within FNHA coverage that actively undermines health equity.

The Impact of Weight-Based Stigma and Systemic Racism on Healthcare Access

Beyond policy limitations, the Canadian healthcare system itself provides obstacles for Indigenous populations due to pervasive weight-based stigma[29] and deeply entrenched systemic racism.[26] Individuals with obesity frequently report experiencing stigmatization within healthcare systems,[30] with a striking 65% of Canadian patients with obesity reporting experiencing "fat shaming" from their physicians.[31]

Systemic racism is deeply embedded within the Canadian healthcare system, resulting in discriminatory treatment and worse health outcomes for Indigenous peoples.[26] The BC-based *In Plain Sight* report documents widespread

experiences of both individual and systemic racism, revealing that Indigenous patients often develop coping mechanisms in anticipation of racism, or opt to avoid seeking care altogether.[26] Healthcare professionals, often unknowingly, may interpret patient "apathy" as non-compliance, failing to recognize that these behaviours are responses to stress, historical discrimination, and systemic exclusion.[20] Further, epistemic racism, which prioritizes Western biomedical knowledge systems while devaluing Indigenous ways of knowing, can further marginalize Indigenous patients.[32]

Geographic Isolation

Geographic isolation is a substantial barrier to healthcare access for Indigenous peoples residing in rural, remote, and northern regions of Canada.[33] Indigenous peoples are far more likely than non-Indigenous people to live in rural and remote communities,[34] likely a direct result of settlement patterns linked to historical relocation by the Canadian government.[34,35] These isolated communities face considerable challenges in attracting and retaining qualified health professionals, frequently relying heavily on nurses or community health workers whose scope of practice may be limited.[33] The scarcity of primary care providers in rural and remote Canada reduces opportunities for early intervention and longitudinal care,[36] including obesity care and treatment.

The Role of Disrupted Traditional Food Systems and Food Insecurity

Colonization profoundly disrupted Indigenous food systems, severely impacting the health and well-being of Indigenous communities.[37] This disruption precipitated a shift towards increased reliance on commercially processed, often less nutritious, foods, and a decreased consumption of traditional foods.[37,38] This shift away from nutrient-dense, locally sourced traditional foods has contributed to the rising rates of obesity and nutrition-related chronic diseases for many Indigenous populations in Canada.[20] Beyond physical health, the erosion of traditional food has also resulted in a significant loss of cultural heritage, as traditional foods are intricately linked to cultural identity, ceremonies, and social cohesion.[38]

Stress, Mental Health, and Obesity in Indigenous Communities

The enduring impacts of colonization and social exclusion have generated chronic stress that deeply affects the mental and emotional health of Indigenous peoples.[20] Intergenerational trauma, particularly stemming from the Residential School System,[39] continues to manifest as high rates of anxiety, depression, post-traumatic stress disorder, substance use, and suicide.[40] These mental health challenges are closely linked to physical health outcomes, including the prevalence and severity of obesity.[20] Chronic stress triggers prolonged activation of the hypothalamic-pituitary-adrenal (HPA) axis, resulting in elevated cortisol levels.[40] Cortisol promotes visceral fat accumulation, increases appetite, and disrupts metabolic function, all of which contribute to weight gain and difficulty losing weight.[40]

Beyond these physiological effects, the constant burden of stress and trauma also causes profound morale and well-being costs.[41] Living with the compounded challenges of racism, poverty, and intergenerational trauma can erode hope and diminish quality of life. Feelings of shame, stigma, and disempowerment may prevent individuals from seeking care, while the repeated experience of discrimination in healthcare settings can deepen mistrust.[26]

Culturally Safe and Trauma-Informed Approaches to Obesity Care

Foundations of Trauma-Informed Care

Trauma-informed care (TIC) represents a fundamental shift in healthcare provision, moving beyond "what's wrong with you" to "what happened to you?". It is a comprehensive approach that acknowledges the widespread impact of trauma, prioritizing physical and emotional safety and pathways to recovery.[42] Research indicates that traumatic experiences can induce significant and lasting neurochemical and physiological alterations.[42] For Indigenous populations, understanding the profound connection between historical and contemporary trauma is vital for providing sensitive and effective care.[43]

TIC advocates for a holistic approach, focusing on the entirety of the individual rather than solely on isolated symptoms or behaviours.[42] The core principles of TIC include safety, trustworthiness, peer support, collaboration, empowerment, and cultural, historical, and gender responsiveness.[42] Practical strategies for healthcare providers to implement TIC include: professional introduction and role clarification, open body language, anticipatory guidance (informing patients what to expect), obtaining consent for touch, and protecting patient privacy.[42]

Primary Care Providers as Advocates

Primary care providers play an essential role in delivering effective and culturally safe obesity care for Indigenous populations. Family physicians and nurse practitioners (NPs) are uniquely positioned to act as advocates within health care systems that have historically marginalized Indigenous peoples.[44,45] The British Columbia College of Nurses and Midwives (BCCNM) require all registrants,

including NPs, to uphold practice standards in Indigenous Cultural Safety, Cultural Humility, and Anti-Racism.[44] These standards require self-reflection, anti-racist practice, relational care, and using strength-based and trauma-informed practice.[44] Similarly, Doctors of BC has formally recognized the organization's responsibility to advance Truth and Reconciliation, committing physicians in British Columbia to anti-racism, cultural humility, and Indigenous self-determination in health.[45]

Indigenous Ways of Knowing and Traditional Healing Practices

For interventions addressing obesity and related health concerns in Indigenous communities to be truly effective, they must be culturally appropriate and guided by an Indigenous understanding of health.[46] This holistic perspective encompasses physical, mental, emotional, and spiritual dimensions, recognizing their profound interconnectedness with the land and culture. Primary care providers should actively inquire about and integrate patients' individual and community concepts of health and healthy behaviours, including their preferences regarding body size, physical activity, and food.[20]

Programs that promote and authentically incorporate traditional foods are vital for improving health outcomes, ensuring food security, and preserving cultural practices.[38] The Nuxalk Food and Nutrition Program in British Columbia, for example, successfully increased traditional food consumption and improved dietary patterns by documenting and revitalizing traditional food systems within the community.[38] When Indigenous communities own and guide their own culturally-relevant health initiatives, they ensure cultural relevance and longer-term impact.[38]

Recommendations for Equitable Access and Culturally Safe Care

Policy Recommendations

Expanded and Streamlined FNHA Coverage

Advocacy is required for the explicit inclusion of GLP-1/GIP medications for obesity management under FNHA Plan W and provincial PharmaCare programs. This entails recognizing obesity as a chronic disease requiring pharmacotherapy, akin to other chronic conditions.[3] Although this paper focuses on British Columbia, these recommendations have broad applicability across Canada, where similar policy gaps persist. Expanding coverage for obesity pharmacotherapy represents an upstream shift that promotes equity and helps dismantle the existing two-tiered system of care.

Healthcare System Recommendations

Mandatory Anti-Racism and Cultural Safety Training for Healthcare Providers

Comprehensive cultural safety training programs should be provided to healthcare providers, including the cultivation of cultural humility, addressing both implicit and explicit biases, and critically examining the pervasive impact of colonialism and systemic racism on healthcare. This recommendation aligns with the Truth and Reconciliation Commission (TRC)'s Calls to Action, particularly 23iii (*Provide cultural competency training for all health-care professionals*).[39] The San'yas Indigenous Cultural Safety Training Program, for example, offers courses specific to health-care providers across Canada.[47]

Increased Recruitment and Retention of Indigenous Healthcare Providers

Strategic investments are required to create entry pathways and supportive environments for Indigenous students to enroll in and successfully complete healthcare programs, resulting in a more representative Indigenous population in the healthcare workforce. This recommendation aligns with the TRC's Call to Action 23i and 23ii (*Increase the number of Aboriginal professionals working in the health-care field*, and *Ensure the retention of Aboriginal health-care providers in Aboriginal communities*).[39]

Incorporation of Indigenous Learning into Nursing and Medical Schools

Healthcare education curricula should incorporate Indigenous learning as well as courses led by Indigenous faculty to increase knowledge and awareness of the ongoing impact of colonization on Indigenous populations in Canada. As an NP student at Thompson Rivers University (TRU), this writer is proud to state that TRU's NP program has incorporated a mandatory masters-level Indigenous Health Leadership course into the NP curriculum,[48] satisfying the TRC's 24th Call to Action: *We call upon medical and nursing schools in Canada to require all students to take a course dealing with Aboriginal health issues*.[39]

Development of Accessible and Culturally Safe Clinical Environments

Healthcare facilities must be physically accommodating for individuals of all body sizes, including the provision of appropriate equipment and private weighing areas.[31] Communication with individuals with overweight and obesity must be consistently respectful, non-judgmental, and patient-centred, shifting the focus from solely weight loss to the broader goals of health and enhanced quality of life.[31]

Community-Level Recommendations

Support for Revitalizing Indigenous Food Systems

Substantial funding and support must be directed towards Indigenous-led initiatives aimed at restoring traditional foodways. This includes efforts to enhance access to fresh, traditional produce and animal proteins, and to reduce reliance on less healthy commercial food chains.[38,43] Recognizing and actively supporting Indigenous food sovereignty is crucial,[43] empowering communities to control their food access and systems in ways that align with the cultural values and health needs.

Funding for Indigenous-Led Obesity Prevention and Management Programs

It is essential to prioritize and adequately fund programs that are developed, owned, and controlled by Indigenous communities. This ensures cultural relevance, effectiveness, and long-term sustainability.[49] This also includes supporting research regarding Indigenous knowledge-based lifestyle interventions to build a strong evidence base for culturally specific approaches.[49]

Primary Care Provider Practice Recommendations

Emphasis on Holistic Care and Social Determinants of Health

Primary care providers (PCPs) should adopt care models that prioritize the patient's overall well-being, encompassing physical, mental, emotional, and spiritual health, in alignment with Indigenous worldviews. This holistic approach involves screening for and addressing the social determinants of health, including food insecurity, housing instability, and access to culturally safe health care, and facilitating appropriate referrals to community supports.[21]

Building Trust and Longitudinal Relationships

PCPs should anticipate patient mistrust in health care systems due to past and ongoing experiences of racism[26] and approach care as helpers rather than experts.[20] Longitudinal, relationship-centred care allows providers and patients to build a shared understanding of the health, social, and cultural factors that influence obesity and its management.[20]

Integrating Indigenous Ways of Knowing

Using a strengths-based lens is essential in the pursuit of health equity for Indigenous peoples.[50] Effective obesity management for Indigenous patients requires the integration of Indigenous ways of knowing, doing, and being.[20] Building this understanding requires cultural humility and respect for differing worldviews regarding health knowledge.

A Call to Action

The burden of obesity and related chronic disease among Indigenous peoples in Canada reflects historical injustices and persistent systemic inequities. While GLP-1 medications offer substantial therapeutic potential,[13] their impact is constrained by the legacies of colonialism, restrictive policies, pervasive stigma, and systemic racism.[26] The First Nations Health Authority has a 10-year plan to uphold and advance the social determinants of health to in part, address health inequities and to improve wholistic health outcomes of First Nations.[21]

A fundamental transformation in obesity care is necessary: shifting from a narrow biomedical focus to an approach rooted in equity, trauma-informed care, and cultural safety. Obesity must be widely recognized as a complex chronic disease intricately linked to social and cultural determinants. Policy changes to support GLP-1/GIP medication coverage are urgently needed.

Primary care providers are situated in an exceptional service and practice environment to provide this much-needed service to Indigenous patients. A holistic, patient-centred approach, together with cultural humility and trauma-informed practices, uniquely positions health care providers to navigate systemic barriers and integrate Indigenous ways of knowing into comprehensive obesity management.

Achieving health equity for Indigenous peoples in Canada requires a concerted commitment from all stakeholders. Policymakers must enhance pharmaceutical coverage regulations, educational and healthcare institutions must eradicate systemic racism and cultivate safe and accessible environments, communities must be empowered to lead and revitalize their health and food systems, and healthcare providers must recognize the complexity of obesity management and embrace patient-centred, culturally safe care for their Indigenous patients. Only then will pharmaceutical innovations like GLP-1 therapies achieve their full potential for all.

References

1. Zheng H, Echave P, Mehta N. Obesity-mortality link over the life course: The contribution of population compositional changes. Biodemogr Soc Biol. 2020;66(1):50–68. doi: 10.1080/19485565.2020.1821597.
2. Canadian Medical Association (CMA). Obesity in Canada: Causes, consequences and the way forward. 2015. Available from: https://www.cma.ca/sites/default/files/2018-11/BR2015-12.pdf
3. Hale I, Manjoo P. Obesity as chronic disease. BC Med J. 2021 Jun;63(5):219.
4. World Health Organization (WHO). Obesity and overweight. 2025 May 7. Available from: https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight

5. Kirk SFL, Ramos Salas X, Alberga AS, Russell-Mayhew S. Canadian adult obesity clinical practice guidelines: Reducing weight bias in obesity management, practice and policy. 2020. Available from: https://obesitycanada.ca/guidelines/weightbias

6. Rubino F, Puhl RM, Cummings DE, Eckel RH, Ryan DH, Mechanick JI. Joint international consensus statement for ending stigma of obesity. Nat Med. 2020;26(4):485-497. doi: 10.1038/s41591-020-0803-x.

7. Brown J, Clarke C, Johnson Stoklossa C, Sievenpiper J. Canadian adult obesity clinical practice guidelines: Medical nutrition therapy in obesity management. 2022. Available from: https://obesitycanada.ca/guidelines/nutrition

8. Wilding JPH, Batterham RL, Calanna S, Davies M, Van Gaal LF, Lingvay I. Once-weekly semaglutide in adults with overweight or obesity. N Engl J Med. 2021;384:989-1002. doi: 10.1056/NEJMoa2032183

9. Biertho L, Hong D, Gagner M. Canadian adult obesity clinical practice guidelines: Bariatric surgery surgical options and outcomes. 2020. Available from: https://obesitycanada.ca/guidelines/surgeryoptions

10. Pedersen SD, Manjoo P, Wharton S. Canadian adult obesity clinical practice guidelines: Pharmacotherapy for obesity management. 2022. Available from: https://obesitycanada.ca/guidelines/pharmacotherapy

11. Pedersen SD, Manjoo P, Dash S, Jain A, Pearce N, Oddar M. Pharmacotherapy for obesity management in adults: 2025 clinical practice guideline update. Can Med Assoc J. 2025;197(27):E797-E809. https://doi.org/10.1503/cmaj.250502

12. Seino Y, Fukushima M, Yabe D. GIP and GLP-1, the two incretin hormones: Similarities and differences. J Diabetes Investig. 2010;1(1-2):8–23. doi: 10.1111/j.2040-1124.2010.00022.x.

13. Lincoff AM, Brown-Frandsen K, Colhoun HM, Deanfield J, Emerson SS, Esbjerg SE, et al. Semaglutide and cardiovascular outcomes in obesity without diabetes. N Engl J Med. 2023;389(24):2221-2232. doi: 10.1056/NEJMoa2307563

14. Aronne LJ, et al. Tirzepatide as compared with semaglutide for the treatment of obesity. N Engl J Med. 2025;393(1):26-36. doi: 10.1056/NEJMoa24163

15. Kruse Klausen M, Thomsen M, Wortwein G, Fink JA, Fink-Jensen A, Klausen MK. The role of glucagon-like peptide 1 (GLP-1) in addictive disorders. Br J Pharmacol. 2022;179(4):625–641. doi: 10.1111/bph.15677.

16. Scheen AJ. Glucagon-like peptide-1 receptor agonists and alcohol use disorders: An emerging unexpected beneficial effect. Diabetes Obes Metab. 2025;27(8):4083–4091. doi: 10.1111/dom.16453.

17. Government of British Columbia. Medications for weight loss marketed in Canada. 2025. Available from: https://www2.gov.bc.ca/assets/gov/health/practitioner-pro/provincial-academic-detailing-service/bc_pad_2024_medications_for_weight_loss_drug_table_july_2025_update.pdf

18. British Columbia PharmaCare. Formulary search. 2025. Available from: https://pharmacareformularysearch.gov.bc.ca/

19. Government of British Columbia. Services covered by medical services plan. 2025. Available from: https://www2.gov.bc.ca/gov/content/health/health-drug-coverage/msp/bc-residents/benefits/services-covered-by-msp

20. Henderson RI, Boyling E, McInnes A, Green M, Jacklin K, Walker L, et al. Canadian Adult obesity clinical practice guidelines: Obesity management and Indigenous peoples. 2020. Available from: https://obesitycanada.ca/guidelines/indigenouspeoples

21. First Nations Health Council. Ten-year strategy on the social determinants of health for BC First Nations. 2022. Available from: https://fnhc.ca/wp-content/uploads/2022/10/GWXII_10-year-strategy_web.pdf

22. Wispelwey B, Tanous O, Asi Y, Hammoudeh W, Mills D. Because its power remains naturalized: Introducing the settler colonial determinants of health. Front Public Health. 2023;11:1137428. doi: 10.3389/fpubh.2023.1137428

23. Kim PJ. Social determinants of health inequities in Indigenous Canadians through a life course approach to colonialism and the residential school system. Health Equity. 2019;3(1):378–381. doi: 10.1089/heq.2019.0041

24. Batal M, Decelles S. A scoping review of obesity among Indigenous peoples in Canada. J Obes. 2019:9741090. doi: 10.1155/2019/9741090.

25. Public Health Agency of Canada. Key health inequalities in Canada: A national portrait. 2018. Available from: https://www.canada.ca/content/dam/phac-aspc/documents/services/publications/science-research-data/8.Obesity-EN_final.pdf

26. Turpel-Lafond MD. In plain sight: Addressing Indigenous-specific racism and discrimination in BC health care – data report. 2020. Available from: https://engage.gov.bc.ca/app/uploads/sites/613/2020/11/In-Plain-Sight-Full-Report-2020.pdf

27. Government of British Columbia. First nations health benefits Plan W. 2025. Available from: https://www2.gov.bc.ca/gov/content/health/health-drug-coverage/pharmacare-for-bc-residents/who-we-cover/first-nations-health-authority-clients

28. Indian Health Service. Formulary brief: GLP1 and GLP1/GIP RAs in DM2 and obesity. 2023. Available from: https://www.ihs.gov/sites/nptc/themes/responsive2017/display_objects/documents/guidance/NPTC-Formulary-Brief-GLP-and-GLP-GIP-RAs-for-DM-and-Obesity-FINAL.pdf

29. Ryan L, Quigley F, Birney S, Crotty M, Conlan O, Walsh JC. Beyond the scale: A qualitative exploration of the impact of weight stigma experienced by patients with obesity in general practice. Health Expect. 2024;27:e14098. doi: 10.1111/hex.14098.

30. Phelan SM, Burgess DJ, Yeazel MW, Hellerstedt WL, Griffin JM, van Ryn M. Impact of weight bias and stigma on quality of care and outcomes for patients with obesity. Obes Rev. 2015;16(4):319-326. doi: 10.1111/obr.12266.

31. Government of British Columbia. BG guideline for obesity and overweight in adults. 2024. Available from: https://www2.gov.bc.ca/assets/gov/health/practitioner-pro/bc-guidelines/obesity_overweight_guideline_draft_for_external_review_extended.pdf

32. Schultz A, Nguyen T, Sinclaire M, Fransoo R, McGibbon E. Historical and continued colonial impacts on heart health of Indigenous peoples in Canada: What's reconciliation got to do with it? CJCO Open. 2021;3(12):S149-S164. https://doi.org/10.1016/j.cjco.2021.09.010

33. Nguyen NH, Subhan FB, Williams K, Chan CB. Barriers and mitigating strategies to healthcare access in Indigenous communities of Canada: A narrative review. Healthcare (Basel). 2020;8(2):112. doi: 10.3390/healthcare8020112.

34. Statistics Canada. Distance as a factor for First Nations, Metis, and Inuit high school completion. 2023. Available from: https://publications.gc.ca/collections/collection_2023/statcan/81-595-m/81-595-m2023002-eng.pdf

35. Dussault R, Erasmus G. The High Arctic Relocation: A report on the 1953–55 relocation. Royal Commission on Aboriginal Peoples. Toronto: Canadian Government Publishing; 1994. Available from: https://data2.archives.ca/rcap/pdf/rcap-458.pdf

36. Rush KL, Seaton CL, Burton L, Smith MA, Li EPH. The healthcare experiences of rural-living Canadians with and without a primary care provider: A qualitative analysis of open-ended cross-sectional survey responses. Prim Health Care Res Dev. 2025;26:e1. doi: 10.1017/S1463423624000677

37. Chai L. Food insecurity and its association with multiple health outcomes among Indigenous peoples in Canada: The buffering role of culture-based resources. Ethn Health. 2024;29(3):371–94.

38. Amson A, Zhang J, Frehlich L, Ji Y, Checholik C, Doyle-Baker P, et al. Nutritional interventions for indigenous adults in Canada - opportunities to sustain health and cultural practices: A scoping review. Int J Circumpolar Health. 2024;83(1):2418152. doi: 10.1080/22423982.2024.2418152.

39. Truth and Reconciliation Commission of Canada. Calls to action. 2015. Available from: https://ehprnh2mwo3.exactdn.com/wp-content/uploads/2021/01/Calls_to_Action_English2.pdf

40. Lengton R, Schoenmakers M, Penninx BWJH, Boon MR, van Rossum EFC. Glucocorticoids and HPA axis regulation in the stress-obesity connection: A comprehensive overview of biological, physiological and behavioural dimensions. Clin Obes. 2025;15(2):e12725. doi: 10.1111/cob.12725.

41. Menzies P. Intergenerational trauma and residential schools. The Canadian Encyclopedia. 2024 May 30. Accessed 2025 Jul 18. Available from: https://www.thecanadianencyclopedia.ca/en/article/intergenerational-trauma-and-residential-schools

42. Dziak M. Trauma-informed care. Salem Press Encyclopedia of Health. 2023.

43. Kitty D, Funnell S. CanMEDS-FM Indigenous Health Supplement. The College of Family Physicians of Canada; 2020. Available from: https://www.cfpc.ca/CFPC/media/PDF/CanMEDS-IndigenousHS-ENG-web.pdf

44. British Columbia College of Nurses and Midwives (BCCNM). Practice standards: Indigenous cultural safety, cultural humility, and anti-racism. 2025. Available from: https://www.bccnm.ca/NP/PracticeStandards/Pages/CulturalSafetyHumility.aspx

45. Doctors of BC. Truth and reconciliation. 2025. Available from: https://www.doctorsofbc.ca/about-us/what-we-stand/truth-reconciliation

46. Kshatriya M, Wang KW, Hildebrand J, Crawford R, Nadarajah A, Youssef M, et al. The effectiveness of Indigenous knowledge-based lifestyle interventions in preventing obesity and type 2 diabetes mellitus in Indigenous children in Canada: A systematic review. Adolesc Health Med Ther. 2023;14:175–193. doi: 10.2147/AHMT.S405814.

47. San'yas. Anti-racism Indigenous cultural safety training program. 2025. Available from: https://sanyas.ca/

48. Thompson Rivers University. TRU master of nursing – nurse practitioner program structure. 2025. Available from: https://www.tru.ca/nursing/programs/master-of-nursing-nurse-practitioner/program-structure.html

49. Wahi G, de Souza RJ, Hartmann K, Giglia L, Jack SM, Anand SS. Effectiveness of programs aimed at obesity prevention among Indigenous children: A systematic review. Prev Med Rep. 2021;22:101347. doi: 10.1016/j.pmedr.2021.101347.

50. Kennedy A, Sehgal A, Szabo J, McGowan K, Lindstrom G, Roach P, et al. Indigenous strengths-based approaches to healthcare and health professions education: Recognising the value of Elders' teachings. Health Educ J. 2022;81(4):423–438. doi: 10.1177/00178969221088921.