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# Urban Land-based Healing: A Northern Intervention Strategy

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## Abstract

Urban Indigenous populations face significant health and social disparities across Canada. With high rates of homelessness and substance abuse, there are often few options for urban Indigenous Peoples to access land-based healing programs despite the increasingly known and appreciated benefits. In May 2018, the first urban land-based healing camp opened in Yellowknife, Northwest Territories, Canada, one of the first to our knowledge in Canada or the United States. This camp may serve as a potential model for an Indigenous-led and Indigenous-based healing camp in an urban setting. We seek to present preliminary outcome data from the healing camp in a setting with a high-risk population struggling with substance use and homelessness. Reflections are presented for challenging logistical and methodological considerations for applications elsewhere. This northern based effort affords us ample opportunity for expanding the existing knowledge base for land-based healing applied to an urban Indigenous high-risk setting.

## Keywords

Indigenous health, Aboriginal health, traditional medicine, healing, Northwest Territories, Land-based healing

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## Disclosure Statement

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## Introduction

Connection to the land has been a known facet of Indigenous culture for millennia (Freeman, 2019). From an ontological perspective, the land in the Indigenous cultural paradigm cannot be separated from oneself. It is an all-encompassing term that is relational of all beings, things, and features that present themselves when being in nature (Radu, 2018). This is in contrast to the reductionistic concept of land as a mere geographic concept. Similarly, the term *healing* has different constructs across cultures (Waldram, 2012). An arguably non-purposeful, isolationist view of healing (i.e., one that is not considered in a holistic fashion) might be stated as my “joint injury is healing” (i.e., I fell on my knee, hurt myself, and my physical injury is getting better). Whereas in many Indigenous worldviews, healing holds a story of an infinite flux (i.e., non-static) of relative balance between the four dimensions of self and non-self (mind, body, emotion, spirit) (Robbins & Dewar, 2011).

When considering the merging of these two terms into the concept of *land-healing* or the more commonly referred to *land-based healing*, we bring together two powerful entities of practice and service to oneself and Mother Earth. Therefore, the land is an active host and partner to the person or people engaged in land-based healing itself (Hanson, 2012) with a pan-Indigenous formal definition of land-based healing avoided by us due to the variance in the traditional protocols in each region. Land-based healing is better described than defined based on our Elders teachings.

The evidence is mounting for the determined benefits of land-based healing or exposure to nature from a physiologic standpoint with biomarkers and immune-system function improvements demonstrated (Li et al., 2007; Li, 2010; Park et al., 2010; Miyazaki et al., 2011; Beil, 2016). Improved educational outcomes have also been noted with better focus, attention, and learning outcomes revealed (Berman et al., 2008; Atchley et al., 2012; Coles, 2017; Forest School, n.d.). In addition, improved mental and emotional health indicators have been noted with improved mood and depression scores specifically demonstrated (Morita et al., 2007; Abbate-Daga et al., 2013; Halmi, 2013; Swami et al., 2016). From a physical standpoint, being exposed to nature has been shown to lead to faster recovery from surgeries (Park & Mattson, 2008; Park & Mattson, 2009a; Park & Mattson, 2009b), with a likely reduction therefore of overall medical costs.

The examination of the concept of land-based practice within a northern Canadian context, in addition to the identification of successful practices and current challenges, is a rapidly emerging area of scholarship (Redvers, 2016). This conglomerate of expanding literature on the topic provides further analytic and non-analytic-based support for Indigenous perspectives of land-based health and healing. This then furthers opportunities to impact the health and well-being of communities, in addition to self-determined and favourable health-policy and budgetary decisions.

### *The urban land-based healing camp*

In May 2018, a formalized *urban* land-based healing camp opened in Yellowknife, Northwest Territories (NWT), one of the first to our knowledge in Canada or the United States. For context of this region, Indigenous Peoples, including First Nations, Inuit, and Métis, make up over half of the Northwest Territories’ population, and are spread over a vast geographic area (NWT = 1.346 million km<sup>2</sup>). Yellowknife itself is the largest center in the area with a population of 19,569 as of 2016.

Prior to the building and implementation of the urban land-based healing camp, the Elders in the area gathered in a formal planning session to determine the programmatic goals of the project. The involvement of Elders ensured that the traditional protocols of the region were followed in the design, implementation and oversight of the project. Due to the overseeing charity organizations ability to ensure a self-determined governance, funding, and organizational structure was developed, decisions were able to be implemented without the layers of bureaucratic process that often come with some publicly run programs (Arctic Indigenous Wellness Foundation (AIWF), 2019). The overseeing construct within AIWF came from creating a fully Indigenous healing program instead of trying to indigenize an existing Western-based health program (e.g., applying Indigenous concepts and ways to an already existing Western framework).

The original intent of the camp was to target Indigenous men on the streets who are disproportionately vulnerable to suicide and incarceration. Indigenous men are also most often excluded from conventional support services due to assumed and experienced discrimination demonstrated by an unwelcoming environment, stereotyping and stigma, and practice informed by racism (Wylie & McConkey, 2019), which we wanted to acknowledge. Indigenous males in Canada have a notably higher suicide rate than non-Indigenous males (29.6 per 100,000 person-years at risk vs 12.3) (Statistics Canada, 2019), and Indigenous men account for 24% of adult male provincial/territorial custody admissions and 24% of male offenders in federal custody (according to 2014-15 data), which was 8 times higher than the general population (Department of Justice Canada, 2017). The camp quickly realized after opening however that there was need for whole family support locally and ensured that all of its programming was accessible regardless of gender.

In a 2018 City of Yellowknife report, 90% of those experiencing homelessness reported being of Indigenous identity, and the majority of those on the streets (62%) were originally from one of the smaller communities within the NWT (City of Yellowknife, 2018). Despite the inherent difficulties in getting adequate data from this demographic, it is estimated that the homeless rate in Yellowknife is approximately five times that of other Canadian municipalities (Falvo, 2011).

The urban healing camp in Yellowknife is located within city limits, accessible to the public, and built from the ground up with traditional structures such as canvas bush tents, a teepee, and an Inuit traditional tent. These traditional structures were purposefully built not only to ensure cultural representation of all Indigenous Peoples within the City of Yellowknife, but to also ensure the land atmosphere permeated the experience for visitors with sights, smells, sounds, and textures. The camp was outfitted with tent wood stoves, and a cookout fire pit with operations five days a week all year round. Cultural tools and artifacts were placed in the traditional structures, and local traditional foods were made available as much as they were available (i.e., fish, caribou, muktuk, moose, and local plants for tea).



*Figure 1.* AIWF urban land-based healing camp, Yellowknife, NT, Canada

Programming is designed to be reflexive to user needs with a focus on developing cultural identity, self-esteem, agency, and the ability to cope with stress, in addition to fostering social support, as well as providing positive role models and a sense of community-belonging to participants. Specific activities provided to groups, individuals, or families include teachings and mentorship, support with traditional ceremonies, traditional food preparation, language revitalization, traditional tool making, on-the-land teachings, medicine teachings, sweat lodges, traditional Indigenous counselling, and cultural gatherings. Strength-based traditional Indigenous counselling and healing approaches focusing on resiliency are utilized following traditional local protocols. Camp users are rarely offered specific programs or services and do not have to make an appointment unless they specifically ask. Instead, camp users are supported where they are at, even if it is just to enjoy a quiet cup of bush tea by the open fire. This approach follows the modern description of trauma-informed and culturally safe practice, not explicitly defined in traditional Indigenous ways of healing, but inherent in its application by our ancestors.

All of the AIWF organizational board, camp staff, and support people are Indigenous, with representation from First Nations, Métis, and Inuit groups. An Elders council with representation from most of the regions in the Northwest Territories meet biennially in person for planning, advice, and governance pending budget availability. Some Elder representatives are also engaged monthly and engage in urban camp site visits for a specified period of time to offer support and presence to camp users in the program areas previously described. These Elder engagement processes help to inform and guide the board of directors and the executive director with program development and decision making.

The overarching goal of the camp is to combine Indigenous cultural education with traditional Indigenous therapeutic interventions in a wilderness urban setting to favourably impact the health and wellness of marginalized Indigenous populations in Yellowknife, NT, and the surrounding areas. We aimed to accomplish this by designing, adapting, and implementing a self-determined wellness initiative with specific aims identified and outlined.

Table 1.  
*AIWF Urban Land-based Healing Camp Specific Aims*

<b>Project Specific Aims</b>	
<b>Aim</b>	
1	To engage communities in participatory intervention design and adaptation based on Indigenous traditional knowledge
2	To implement community-led and urban land-based wellness programs to those most at risk in the community
3	To conduct ongoing evaluation of programs using a shared Indigenous-centred evaluation framework
4	To identify the core elements of program impact and success that are scalable to other Canadian and international contexts
5	To share project results with Indigenous communities, health and justice system stakeholders, governmental policy-makers, and the scientific community in a culturally sensitive way

Rather than simply indigenizing other existing public-health or medical-/mental-health interventions to appeal to Indigenous peoples, we instead took a self-determinant approach to program development based on local experts and traditional knowledge holders. With this, we recently commenced an internal evaluation element to our programming to get a better sense of our participant demographic and the benefits seen from both a participant and community perspective. The purpose of the current article is to describe our experience aiding the development and implementation of a community and Indigenous led evaluation project in a land-based setting while presenting a subset of our preliminary findings. Our hope is to stimulate current reflections on how evaluation is used within culturally based settings in Indigenous communities while providing considerations for this type of work in the future. We also hope to elucidate potential organizational frameworks for developing land-based healing programs in an urban setting to encourage development of other land-based healing programs in Canada and abroad.

### **Methods**

Due to the preliminary nature of the data coming in, quantitative data collection methods will be presented. An Indigenous evaluation framework was utilized for this project which involves approaching evaluation from a perspective and using methods influenced by Indigenous ways of knowing, frameworks, and cultural paradigms (Waapalaneexkweew (Bowman) & Dodge-Francis, 2018). An Indigenous evaluation framework is grounded and driven by a

community-based process which means each projects evaluation framework may be different in its conceptual and practical design. Indigenous framing is flexible and responsive to local traditions to ensure that cultural values are incorporated and the community voice is part of the decision making process (Kawakami et al., 2007).

The AIWF Elders Council and community oversight board formally approved this work, ensuring traditional Indigenous ethical protocols were followed throughout the process in concert with OCAP™ guidelines. As evaluation and research processes have historically been ‘extractive’ in nature and rooted within non-Indigenous world views (Gaudry, 2011), we prioritized staff, camp user, and Elder leadership on the project. Camp talking circles, emersion into the daily camp life as helpers, and one on one interviews with staff and Elders were utilized to develop the evaluation plan and the tools utilized to collect the data.

With this, a basic drop-in card was created with direct input and participation from staff experienced in working with the local at-risk population, in addition to an experienced Indigenous evaluator with oversight by organizational Indigenous community board members and Elders. The tool was reviewed by a selection of regular camp clients to assess their usability and feasibility and adjustments were made based on those suggestions. The adapted and adjusted Likert scale terminology was chosen based on what was found to be the easiest to relate to for program participants (i.e., really bad, a little down, happy/good, really happy). These cards were filled out by those who did not come for a scheduled program or service, but instead as a cold-call visit to the camp. Basic demographic sections were created on the front of the card, such as name; whether this was a first or repeat visit to camp; preferred gender or other; and home community and referral agency if relevant. The backside of the card listed two visual colour-coded bubbles with four options for feelings (i.e., really bad, a little down, happy/good, really happy) for when the participant first arrived at the camp and then at the end before leaving the camp (see Figure 2).



Figure 2. How did you feel when you got here? / How do you feel now?

Participation in completing the drop-in cards by clients was completely voluntary. The camp staff were responsible for requesting clients to fill out the drop-in cards for their visit in the first data-collection phase that occurred between April 1, 2019, and June 30, 2019, at the Yellowknife site. The drop-in cards were offered only to self-identifying Indigenous clients who were a part of the program funding targeting this group; however, the camp is welcome to all



who seek its support. Camp staff were also responsible for ensuring all cards were locked up onsite and then brought to the secure off-site office space for analysis by the evaluator.

Outside of the data-collection period specified above for this finite evaluation process, camp sign-in logs were also kept for the entire camp starting from April 2018 to the present. These sign-in logs include age, gender identity, home community, and Indigenous identity and are the baseline data-collection method for the camp in general.

Data from the drop-in cards were manually input into a Microsoft Excel 365 software spreadsheet for descriptive and statistical analysis. We included in the descriptive analysis cards that had only portions of the demographic data filled out (i.e., gender); however, we did not include cards that had any level of null data in the pre- and post-feeling questions for the statistical analysis (see Figure 2).

The drop-in card question on how participants were feeling pre- and post-camp visits (see Figure 2) assumed that there would be no difference between the pre- and post-camp visits as the null for statistical analysis. We first sectioned this basic evaluation question into a dichotomous nominal format combining the two most negative feelings (i.e., feeling ‘really bad’ or feeling ‘a little down’) and the two most positive feelings (i.e., feeling ‘happy/good’ or feeling ‘really happy’). As we did not use the standard Likert scale, instead developing alternate wording that worked for our target group, we felt that classifying our variables in this way was appropriate. We removed any null data from the pre- and post-questions and performed a McNemar Chi-Square test using Microsoft Excel 365 software.

### Relationships

The first author, Nicole Redvers, is a new scholar having previously worked as a clinician in the Canadian north. She is a member of the Deninu K’ue First Nation located in Treaty 8 territory in the Northwest Territories, Canada, and is one of the co-founders of AIWF. Donald Prince was the executive director of AIWF with a long history of experience working with Indigenous men in a healing capacity through Indigenous-specific programming. He is a member of the Nakazdli band in Dakelh territory, British Columbia. Melanie Nadeau is an enrolled citizen of the Turtle Mountain Band of Chippewa in North Dakota and completed a doctorate in social behavioural epidemiology. Our collective framework in this research comes from a base of honesty, reciprocity, and respect for the communities we work in and for.

### Results

Between April 1 and June 30, 2019, 159 individuals who attended the camp were included in the analyses. The mean age of the drop-in card group reported was 37 years old (IQR: 25-47), and the majority that indicated stated that they had self-referred to the camp (n=44, 28%).

Table 2. Participants demographic data

Characteristics	N (%)
<b>Total Sample</b>	159 (100)
<b>Gender</b>	
Male	28 (13)
Female	87 (55)
Two-Spirit	1 (0)



Non-response	43(27)
<b>Age [mean (IQR)]</b>	37 (25-47)
<18	6 (4)
18-25	24 (15)
26-36	31 (19)
37-47	22 (14)
48-60	19 (12)
>60	9 (6)
Non-response	48 (30)
<b>Referral Agency</b>	
Local School or College	20 (13)
Self-referral	44 (28)
Friends or Family	21 (13)
Hospital	8 (5)
Community Org	13 (8)
Non-response	53 (33)
<b>Home Community/Region</b>	
North Slave	53 (33)
Inuvik Region	22 (14)
Sahtu Region	11 (7)
Dehcho Region	3 (2)
South Slave Region	8 (5)
Nunavut	6 (4)
Other	13 (8)
Non-response	43 (27)

For the individuals that completed the pre- and post-feelings portions of the card in their entirety (n=159), there was a noticeable difference in how they were feeling when they arrived at the camp compared to when they left the camp (see Figure 3). The results of the McNemar's

Chi-Square test found a statistically significant difference in the proportion of participants who felt better by visiting the camp between the pre- and post-tests ( $p < 0.001$ ).

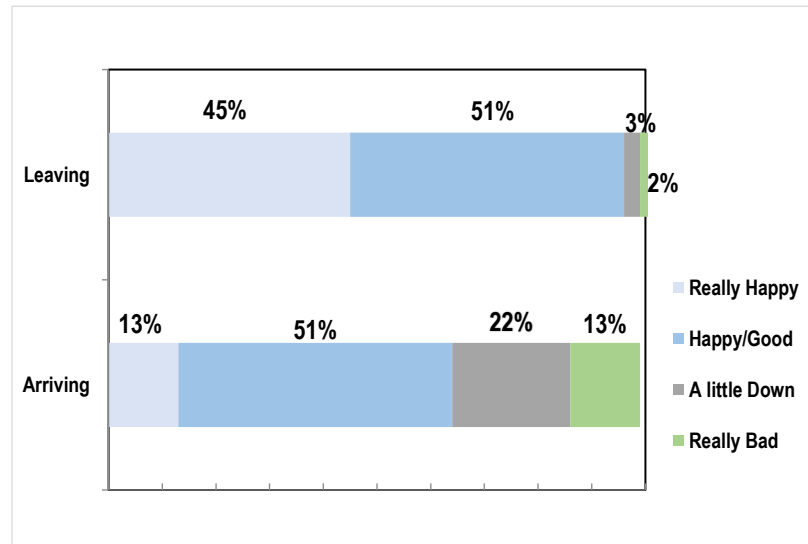


Figure 3. How drop-ins feel when arriving and departing

Data at this point in time was insufficient to run the McNemar's Chi-Square tests for gender comparison. The pre-post sample included 87 females, 28 males, 1 non-binary and 43 not indicating a gender identity; however, we can see that out of the 29 females and 13 males who felt 'a little down' or 'really bad' pre intervention, 27 females (93%) and 13 males (100%) felt 'happy/good' or 'really happy' post intervention. For those who did not identify a gender, the 16 who felt 'a little down' or 'really bad' pre intervention all felt better post intervention (i.e., 'happy/good' or 'really happy').

### Discussion

Although the original intent for the first year of the AIWF urban healing camp was to target Indigenous men and then expand to targeting Indigenous women in later years, we realized very quickly that the interested camp participants were evenly split between men and women based on our *general* camp sign-in log data. However, for the drop-in cards specifically analysed as part of the evaluation, the majority filling them out were women, which conflicts with the data collected from camp logs as per above. It is possible that women were either more likely to agree to fill out the information requested, or they were possibly approached by staff more often to fill

out the forms due to staff comfort with approaching women over men for this purpose. Another possible reason is that men may have been more likely to visit the camp for reasons other than accessing a specific service (e.g., traditional healer, traditional counselling, etc.) compared to non-programmatic or service reasons (e.g., accessing traditional foods and bush tea, craft making) which would not have triggered a survey tool as often. It also must be noted that involving men generally in health programming, research, or evaluation processes can be challenging (Yousaf et al., 2015; Ryan et al., 2019). For Indigenous men specifically, structural factors have been identified that perpetuate continued barriers to wellness programming (Canuto et al., 2018) including a lack of integration of cultural strengths and preferences into health-

seeking approaches (Hughes, 2004), barriers to gaining entry into services, barriers to engagement with services, and staffing incongruencies (Isaacs et al., 2012); however, as men were visiting the healing camp in equal numbers to women as per the general camp logs, we saw this as an achievement regardless of how many men actually participated with the drop-in cards. Men being more likely to show up for non-programmatic reasons, such as accessing traditional foods, craft making, or having a cup of tea, may indicate that the men are benefiting in their own way, and in their own form of healing.

An additional note of importance is that the data presented here are preliminary and foundational in its intent; however, one of the purposes of this paper was to elucidate potential organizational frameworks for developing land-based healing programs in an urban setting and to gauge their potential impact. We also wanted to present an overview of the demographics of our participants attending the camp to demonstrate that Indigenous men in particular can be engaged for wellness programming when it is culturally tailored.

There are firm logistical and methodological challenges when developing effective data collection procedures in a land-based setting. This challenge is multiplied when working with culturally traditional Indigenous communities, where there can be great sensitivity around traditional protocols being shared, and for good reason. Other challenges to consider when designing research or evaluation processes in similar settings are collecting data from transient vulnerable groups, such as those experiencing homelessness, those with a low level of literacy, and being in a tent structure where there are no electrical services to plug in computers in order to collect data.

Many Indigenous communities are resistant to evaluation processes for good reason (Wilson, 2003). To define a measure on a livelihood that is inherent can be seen as a colonial mandate and need to “prove” that the Indigenous way works and/or is valid. In addition, many other programs and services that target vulnerable populations in the area come with large amounts of paperwork for clients to fill out, which can be a barrier to those seeking services. With this, and in keeping with a traditional Indigenous setting on the land as a healing place, there was an important need to ensure that paper and non-traditional items did not interfere with the cultural process of connection that was seen to be inherent to the program’s benefit. This meant that the amount and type of information we could collect would be minimal to ensure the service needs of clients was made a priority over data-collection needs.

The authors are Indigenous members of their communities and have an interest to improve health within their regions. Two of the authors are directly involved in AIWF programming and delivery and therefore have a close relationship to the process (N.R, D.P.). In a reflexive analysis, two of the authors (N.R., D.P.) felt it was important to bring in another researcher outside of the project delivery phase (M.N.) to better ensure impartiality in the data analysis and presentation. A third-party evaluator was also engaged throughout the data collection phase (L.B.) to get outside input on tool design and delivery.

As noted, there were logistical and methodological limitations associated with the data-collection strategy given the highly transient study population that resulted in a cross-sectional study design being chosen compared to a richer longitudinal analysis. We also relied on self-reported data that was collected onsite, which has its own inherent weaknesses (e.g., response bias). It is possible, for instance, that having to submit survey tools to camp staff resulted in biased answers; however, due to many participants feeling comfortable enough to answer the drop-in card pre-feeling assessment as being “a little down” (22%) or “really bad” (13%), the assumption is that clients felt comfortable answering honestly onsite.

The drop-in cards were offered only to clients who were a part of the program funding targeting Indigenous clients so we had to assume that our sample group was fully Indigenous. It is possible that some individuals who were not Indigenous could have accessed the programming; however, we feel this would have been limited. Our staff does not ask for proof of band enrolment since the population experiencing homelessness rarely carry formal identity cards and we don't think it would be an appropriate question to ask in a healing environment.

Our preliminary outcome data are susceptible to confounding given the limited variables we were able to successfully collect with our client population, and therefore account for in statistical modeling. Because service needs were prioritized over data-collection needs, the susceptibility of our results to this additional bias was increased. Despite this, our client's drop-in visits to the camp likely had few other interferences from the outside world that could have affected their perceived benefit in that window of time. Therefore, we feel that due to the one-visit time frame, we were able to accurately get a sense of the holistic impact for a client visiting the urban camp in that moment of time.

We have heard many stories from our camp staff of participants having their lives changed in a positive way after visits to the healing camp, and we hope to gather these stories more formally in future research. We are also engaging in one-on-one interviews with participants to better understand the qualitative features of urban land-based healing that are of the most benefit to clients. These variables and analysis will be included in a future publication once the full evaluation period is complete to get a better sense of client benefit.

Ultimately, we have found that in research around land-based healing, service appeal and programming needs must be put before data-gathering when working with vulnerable populations. Ensuring that loose evaluation rubrics prevail will ultimately limit the ability for robust program analysis in a Western metric model; however, it will likely ensure vulnerable clients feel more comfortable in a land-based healing setting. As AIWF is a self-determined Indigenous organization with an ultimate mandate for ensuring traditional Indigenous healing is accessible and available, our ability to prioritize service delivery over data collection is enabled. We have determined through this project that even in very traditional settings, some level of data collection is possible with cohesive protocols in place; however, the amount and type of data collected should be decided on with front-line staff, clients and Elders involved. This context ensures that there is a better understanding of the vulnerable population in a predominantly Indigenous setting, thereby leveraging the best chance for successful outcomes.

Lastly, and from a practical standpoint, there are some potential implementation barriers to developing urban land-based healing camps versus on-the-land healing camps outside of urban settings that need to be acknowledged. Such barriers include town or city bylaws that may limit the ability to erect traditional Indigenous structures without the proper permits or design plans, national fire codes designating the type of canvas used on tents or teepees, and land ownership and lease agreements pending city development plans pending the land-tax schedules in a given area. These were barriers our project was able to overcome; however, not without months of negotiating, stakeholder engagement, and politicking with support from Indigenous governments.

### **Conclusions**

Our urban land-based healing program is distinguished by an innovative approach to health and wellness intervention that uses the land as a healing place, promoting protective factors identified in the literature as enhancing Indigenous well-being. We hope that this

preliminary evaluation process will continue to identify the transferable components of our urban land-based programs that support these protective factors by using an Indigenous paradigm reflecting both Indigenous and Western knowledge. Through local demonstration of already successful action utilizing traditional cultural and healing knowledge for the well-being of Indigenous peoples, transferability to other contexts and regions may be possible for urban land-based programming. There is real potential to leverage this initiative in other urban areas despite locales not necessarily having access to full land-based wilderness sites. The AIWF project could therefore serve as a proof of concept model for an Indigenous-led and Indigenous-based healing camp, affording ample opportunity to expand the existing knowledge base applied to vulnerable communities.

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