A Longitudinal Evaluation of an On-Reserve Methadone Maintenance Therapy Program

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Table of Contents

Abstract 4

Introduction 5

The Current Study 27

Method 28

  Procedures 29

  Measures 33

  Data Analysis 40

Results 43

Discussion 78

  Limitations and Future Directions 107

Conclusion 110

References 113

Tables 137

Appendix A 143

Appendix B 144

Abstract

Canada's First Nations population experiences elevated rates of opioid use and negative opioid-related consequences. These rates stem from the long history of colonization that First Nations populations have faced, which has resulted in unique treatment access barriers and a need for culturally and contextually relevant treatment. The purpose of this study was to longitudinally evaluate the first on-reserve methadone maintenance therapy program in Canada through both client questionnaires and staff interviews. Forty-nine clients (mean age of 40, 51% female, 100% First Nations identification) and 11 staff members of the program participated in this study. Overall, clients noted self-improvement; improved quality of life, housing condition, employment status, and family support; and decreases in symptoms of anxiety and depression, overall psychological and physical distress, and drug use and high-risk behaviours. Qualitatively, clients spoke positively of the treatment centre and noted challenges of the program. Staff noted their primary goal as seeing clients become substance free and they also spoke about the importance of the community's support of the program. Staff noted challenges with funding and reported a desire to see the program continue to help the community until everyone is healed. Overall, the results of the evaluation were positive and show that the program is succeeding in the eyes of the clients and the staff.

A Longitudinal Evaluation of an On-Reserve Methadone Maintenance Therapy Program

Prescription opioid dispensing in Canada for pain management has continued to increase or to remain high, despite awareness that these prescriptions are causing serious difficulties for the population (Murphy, Goldner, & Fischer, 2015). In 2015, 13.1% of Canadians had used opioid pain relievers and 2.2% of those who had used opioids (82,000 individuals) reported using them for non-medical purposes (Statistics Canada, 2015; Statistics Canada, 2017). Canadians reported obtaining prescriptions from a single physician, from multiple physicians ("double doctoring"), through prescription fraud and forgery, through theft, on street drug markets, and through internet purchases (Canadian Centre on Substance Abuse and Addiction, 2017). In 2016 there were at least 2,816 opioid-related deaths in Canada, resulting in a rate of 7.8 deaths per 100,000 individuals (Government of Canada, 2017).[1]

While the above-mentioned rates are greatly concerning for the general population in Canada, Indigenous populations experience even higher rates of prescription and non-prescription opioid use and subsequently, greater adverse consequences. Between 1999 and 2009, the proportion of First Nations people in Ontario receiving opioids through Non-Insured

[1] It is necessary to clarify that statistics specific to the province of Ontario are often referenced throughout this document going forward, however this is because there tends to be more information available regarding opioid use in Ontario than in other provinces. Where national level data are available, they are presented. As well, equivalent comparison statistics between Canadian and Indigenous populations do not often exist, nonetheless, the information provided attempts to present the current state of opioid use in both Canada and in Indigenous populations as clearly as possible.

Health Benefits (the program that provides prescription coverage for First Nations individuals) did not increase, however, the quantity and proportion of prescribed oxycodone increased significantly (First Nations Inuit Health Branch, 2010). Throughout Canada, 25.9% of First Nations individuals reported using prescription opioids in the past year (First Nations Information Governance Centre, 2018), which suggests likely opioid related issues in Canada's First Nations population. Additionally, in Ontario in 2007, 898 opioid prescriptions were given for every 1,000 First Nations individuals over the age of 15 (Canadian Centre on Substance Abuse, 2013), while one out of seven people in the general Ontario population filled an opioid prescription between 2015 and 2016 (Health Quality Ontario, 2017). Despite these high rates of opioid prescriptions among First Nations individuals, the issue of pain is very rarely addressed when opioid related challenges among First Nations are discussed publicly (Nelson, Browne, & Lavoie, 2016). The high rate of prescriptions and associated consequences is partially related to overprescribing by physicians who are on short-term contracts in First Nations communities attempting to manage acute or chronic pain in their patients (Webster, 2013). Fortunately, Non-Insured Health Benefits updated opioid prescribing guidelines in 2013 in response to these rates, however the negative effects of past prescribing are still being observed.

Non-prescription opioid use is also a concern. Almost 5% of First Nations adults in Canada reported using non-prescription opioids in the past year (First Nations Information Governance Centre, 2011) and 0.3% had used heroin specifically (First Nations Information Governance Centre, 2018). Among Indigenous youth in Canada, 22% reported using prescription pills without a prescription (Tsuruda, Hoogeveen, & Smith, 2012), with 11% of First Nations youth in Canada reporting the use of non-prescribed prescription drugs specifically to get high (Elton-Marshall, Leatherdale, & Burkhalter, 2011). The availability of prescription opioids in

First Nations communities is related to the diversion of prescription opioids, which are overprescribed, as well as trafficking of oxycodone and other opioids from larger city centers (Nishnawbe-Aski Police Service, 2012).

These rates of opioid use in First Nations communities in Canada have likely contributed to the concern that First Nations individuals have about the use of illegal drugs. Eighty-two percent of First Nations people place their concern with drugs and alcohol as the most significant issue encountered by their community (First Nations Information Governance Centre, 2011). This concern is understandable given that the overdose death rate among First Nations people is nearly three times that of the general population (13.3% vs. 4.8%; Milloy et al., 2010). Regarding the epidemic of oxycodone in First Nations communities, in 2009, the Northwestern Ontario First Nations Chiefs declared a state of emergency (Nishnawbe Aski Nation, 2009).

Defining Opioid-Related Disorders

The *Diagnostic and Statistical Manual of Mental Disorders* (5th edition; DSM-5) defines opioid-related disorder as a problematic pattern of opioid use causing clinically significant distress or impairment that is determined by the presence of specific circumstances or behaviours (American Psychiatric Association, 2013). Opioid-related disorder is classified according to severity (mild, moderate, severe) and related disorders include opioid intoxication, opioid withdrawal, other opioid-induced disorders, and unspecified opioid-related disorder (American Psychiatric Association, 2013).

While no longer used in the most recent edition of the DSM, the terms dependence and abuse are used throughout the literature. The cognitive, behavioural, and physiological symptoms that are associated with continued use of a substance despite substance-related issues are referred to as dependence. Abuse refers to the problematic pattern of substance use that is demonstrated

by recurring adverse consequences related to the repeated use of a substance (American Psychiatric Association, 2000).

Definition of Cultural Terms

The term Indigenous refers to populations on an international scale and is used to delineate the first inhabitants of an area from European colonial settlers (Anderson et al., 2006; Montenegro & Stephens, 2006; Sylvain, 2002). It also refers to humans, animals, and plants originating or occurring naturally in a particular place, which encompasses the relationships Indigenous peoples have with their traditional territories (Institute of Aboriginal Peoples' Health, 2014). The term Indigenous is the preferred term of reference and has been deemed more uniting and less colonizing than the term Aboriginal, which comes from the Canadian Constitution (Institute of Aboriginal Peoples' Health, 2014). The term Indigenous has been used throughout this document where specific group names were not provided in the literature. The term First Nations is used to describe members of Indigenous groups in Canada who are neither Inuit (originating from the Arctic and sub-Arctic regions) nor Métis (descendants of marriages between First Nations individuals and European settlers; *Constitution Act*, 1982, s 35; Milloy et al., 2010; Policy Research Initiative, 2003). Approximately 4.3% of the Canadian population (1,400,685 people) reported Indigenous identity in the 2011 Census, of which, 60.8% identified as First Nations, 32.3% identified as Métis, and 4.2% identified as Inuit (Statistics Canada, 2011).

There is a substantial body of literature which acknowledges the importance of recognizing diversity among Indigenous peoples (Indian and Northern Affairs, n.d.). In the past, Indigenous peoples have been referred to as if they were one large group (Goforth, 2007), however, there is enormous diversity among Indigenous groups in Canada. In Canada, there are

approximately 596 bands located on 2,284 reserves and crown land, where 10 different languages are spoken with over 58 different dialects (Culture and Mental Health Research Unit et al., 1994). Within each of these diverse areas, substantial regional, cultural, socioeconomic, and community differences exist (Goforth, 2007).

Opioids & Consequences Related to Use

Opiates, such as heroin, morphine, and codeine, are made from naturally occurring alkaloids in the resin of the opium poppy, while opioids, such as oxycodone, hydrocodone, and methadone, are created synthetically to have opiate-like effects (National Institute on Drug Abuse, 2011). The term opioid is used to describe drugs, both natural and synthetic, that act on opioid receptors (National Institute on Drug Abuse, 2011). While the primary use of opioids is for pain relief, opioids also offer anxiolytic, antidepressant, and antipsychotic effects, making them common for self-medication purposes (Khantzian, 1997). Opioids enter the brain through the bloodstream where they act as artificial endorphins and dopamine, producing a feeling of pleasure or euphoria that is unique to most other naturally occurring feelings in the body (Kosten & George, 2002). This experience is often so enjoyable that individuals seek to re-experience it through continued substance use (Kosten & George, 2002). After repeated use, the brain's production of natural dopamine and endorphins becomes limited, which makes the experience of pleasure challenging outside of opioid use (Kosten & George, 2002). The continued search for this feeling causes individuals to develop tolerance (requiring more and more of the substance to have the same effect), which leads to physical dependence on the substance (which can produce withdrawal effects when the substance is not taken), followed by psychological dependence (which produces cravings and urges to continue taking the substance; Kosten & George, 2002).

Illicit prescription opioids, such as oxycodone, are the most common and most frequently misused type of opioids, even when compared to heroin (Compton & Volkow, 2006; Currie & Wild, 2012). OxyContin (brand name of oxycodone) production was discontinued in Canada in 2012 due to the rising concerns of misuse, addiction, and subsequent consequences, however it was replaced with OxyNeo, which was designed to be more difficult to abuse (Ireland & Trinh, 2012). OxyNeo continued to be overprescribed by physicians, and individuals looking to abuse the drug, quickly found ways to do so (Weeks & Howlett, 2015). Canada is the leading per capita consumer of prescription opioids in the world (Dasgupta et al., 2006; Fischer, Nakamura, Rush, Rehm, & Urbanoski, 2010; Wisniewski, Purdy, & Blondell, 2008), with particularly high volumes of fentanyl and hydromorphone (International Narcotics Control Board, 2017). This indicates that the discontinuation of OxyContin production has not solved all of Canada's opioid issues.

With this high rate of consumption comes high levels of opioid related mortality and morbidity. Globally, opioids are the single largest contributor to illicit drug-related mortality and morbidity (Brown & Lawrence, 2009), with prescription opioids causing more overdose deaths than heroin and cocaine combined (National Institute on Drug Abuse, 2011). In Ontario in 2012 when OxyContin was still in production, there were 595 deaths due to opioid overdose, compared to 625 in 2013 when it was no longer in production (Office of the Chief Coroner of Ontario, 2016). Additionally, in Ontario opioid overdose results in more deaths than motor vehicle collisions (Office of the Chief Coroner of Ontario, 2016; Ontario Ministry of Transportation, 2015). There is now also rising concern in Canada surrounding the growing number of accidental overdose deaths caused by fentanyl-laced drugs (International Narcotics Control Board, 2017).

While mortality is a major consequence of opioid use, opioid related morbidity is also a concern, including illnesses such as cardiac arrhythmia, respiratory depression, chronic liver disease, chronic renal disease, tuberculosis, human immunodeficiency virus (HIV) and other sexually transmitted infections, chronic pain, injuries, non-fatal overdoses, comorbidity with other substance use disorders, and comorbidity with other psychological disorders (e.g., depression, anxiety, posttraumatic stress disorder; Currie & Wild, 2012; Kreek, 1978; Veilleux, Colvin, Anderson, York, & Heinz, 2010). Additionally, injection drug use leads to an increased risk of contracting infectious diseases (Amato et al., 2005; Karon, Fleming, Steketee, & De Cock, 2001; Kreek & Vocci, 2002; Ward, Hall, & Mattick, 1999; Wood et al., 2005) and the illegal market of opioids produces other associated risks due to the cycle that opioid users often fall into (United Nations Office on Drugs and Crime, 2014). This cycle regularly has users spending most of their time finding, buying, and taking the illicit drug, which can involve criminal activities such as theft, violence, or prostitution (Amato et al., 2005).

Opioid Use Among First Nations Peoples

Rates of overdose mortality among First Nations individuals in Canada are highly elevated; from 2001 to 2005, over 13% of First Nations deaths were due to overdose compared to less than 5% in the general population (Milloy et al., 2010). More specific opioid-related statistics for First Nations populations are difficult to find, but the Canadian Centre on Substance Abuse (2013) reported that in 2010 there were 55 opioid-related emergency room visits by First Nations individuals for every 10,000 people in Ontario, compared to less than four visits per 10,000 for all Ontarians. Additionally, in Ontario, from 2004 to 2009, a three-fold increase was seen in the number of First Nations people seeking treatment for prescription opioid use difficulties (Calverson, 2010). Among First Nations individuals in Canada, 4.4% had sought

treatment for prescription or illicit substance use in the past year and completed treatment, while 2.4% had sought treatment, but did not complete it, and 1.2% had sought treatment, but could not locate available services (First Nations Information Governance Centre, 2018).

The medical risks that Indigenous individuals face related to opioid use are also elevated, particularly the risk of HIV infection. Approximately 9% of HIV infections in Canada are accounted for by Indigenous individuals, despite representing less than 5% of the Canadian population (Public Health Agency of Canada, 2012). Indigenous individuals are becoming HIV positive almost four times more often than non-Indigenous Canadians (Public Health Agency of Canada, 2012) and Indigenous individuals who use injection drugs are the fastest growing group of new HIV cases in Canada (Wardman & Quantz, 2006). Approximately 58% of Indigenous individuals with HIV are exposed through injection drug use (Public Health Agency of Canada, 2012).

There are also risks related to the illicit use and injection of opioids that are elevated among Indigenous individuals. Indigenous populations experience higher rates of crime related to substance use and represent approximately 22% of the incarcerated population in Canada with many offenses relating to illicit drug use (Canadian Foundation for Drug Policy, 1998; Prison Justice, 2007). Regarding injection related risks while incarcerated, HIV infected substance users were significantly more likely to report lending a used syringe if they had been incarcerated during the past 6 months (Wood et al., 2005). Because Indigenous peoples are incarcerated at a much higher rate than non-Indigenous peoples, these unsafe acts of injection may represent another increased risk for Indigenous individuals (Canadian Foundation for Drug Policy, 1998; Prison Justice, 2007).

The prevalence of psychological difficulties is also elevated for Indigenous individuals who use opioids. Indigenous individuals who use opioids experience higher rates of depression, have more difficulty managing aggressive behaviour, and are more affected by the presence of psychological difficulties than their non-using counterparts (Jacobs & Gill, 2002). In relation to these psychological difficulties, Indigenous individuals who abuse substances are often quite affected by family issues and have difficulty getting along with friends (Jacobs & Gill, 2002). These individuals are also likely to live with someone who is currently, or has in the past, abused drugs or alcohol (Jacobs & Gill, 2002).

Understanding the higher rates of substance use difficulties among First Nations populations requires a consideration of history. First Nations people have faced a long history of colonization, such as the criminalization of culture and language, rapid cultural change, the creation of the reserve system, the change from an active to a sedentary lifestyle, systematic racism, forced assimilation through residential schools, and child-welfare policies (Health Canada, National Native Alcohol and Drug Abuse Program, & Assembly of First Nations, 2011; Reading & Wien, 2009), all of which have been traumatic. This ongoing and historical trauma is associated with complex, cumulative, and intergenerational impacts (Gone, 2013), which affect the health and wellbeing of communities, contributing to lower socioeconomic status, poor nutrition, violence, and crowded living conditions (Health Canada et al., 2011; Reading & Wien, 2009). Additionally, a range of disproportionate mental health concerns such as substance abuse, depression, anxiety, and suicide have resulted from the historical trauma that First Nations peoples have faced (Gone, 2007; Gone, 2013; Huang et al., 2006; Kirmayer, Simpson, & Cargo, 2003; Olson & Wahab, 2006). Others have found similar vulnerabilities to substance use; Indigenous individuals who live in poverty with low education, unstable family structure,

frequent physical abuse, or poor social support networks, are at a high risk of substance abuse (Duran et al., 2005; Methadone Strategy Working Group, 2013).

To further impact these challenges, historical trauma is transferred intergenerationally in that traumatic experiences endured by an individual may also come to affect the well-being of their children and subsequently, their grandchildren, and so on (Yehuda & Bierer, 2008). For example, First Nations adults with a parent who attended a Residential School, tend to have higher rates of symptoms of depression, adverse childhood experiences, the experience of trauma in adulthood, and discrimination compared to First Nations individuals whose parents did not attend a Residential School (Bombay, Matheson, & Anisman, 2009). This ongoing experience of trauma may position individuals to experience greater future stress and a greater response to stress (Bombay et al., 2009). When combined with persistent sociocultural disadvantages, this stress may increase an individual's vulnerability to exhibiting effects of trauma, for example through the experience of depression, anxiety, and substance use difficulties (Bombay et al., 2009).

Consideration of this historical connection to rates of substance use allows for some understanding of culturally specific treatment access barriers (Wing, Crow, & Thompson, 1995). Wing and colleagues (1995) identified two treatment access barriers that must be considered when determining how to better treat Indigenous populations; the first is that effective relationships between clinicians and Indigenous clients may take more time and effort because the development of trust and intimacy with new people requires time and experience. Additionally, for traditional Indigenous peoples, difficulties experienced may be considered as having lost touch with the spiritual world, which can be personally shameful to admit (Wing et al., 1995). Treatment barriers also arise around stigmatization, negative stereotypes, and a lack of

cultural awareness that Indigenous peoples experience from service providers (Wardman & Quantz, 2006).

Additional barriers to treatment also exist for Indigenous individuals seeking treatment for substance abuse. Treatment access is constrained, not only by the cultural barriers mentioned, but also by financial and geographic obstacles, especially in remote areas where services are challenging and expensive to provide (Palafox, Buenconsejo-Lum, Ka'ano'I, & Yamada, 2001). As well, in circumstances where Western health care could be effective and/or is desired in a First Nations community, these services often remain difficult to access (Simmons & Voyle, 2003; Wilkinson, Ryan, & Hiller, 2001). Individuals in remote communities often have low finances, few treatment choices, inconvenient treatment hours where treatment is available, and a lack of transportation to treatment centers and hospitals (Chong & Herman-Stahl, 2003). All of these factors represent financial and geographic barriers to treatment for substance abuse for Indigenous populations.

These barriers to treatment for Indigenous populations outline the need for culturally relevant treatment approaches. Gone (2013) proposed an Indigenous rationale for culture as treatment, which suggested that there are religious, political, and pragmatic reasons for incorporating cultural components into therapeutic settings. Regarding religious reasons, participation in Indigenous cultural practices is understood in First Nations contexts to initiate connections with the spiritual world, which allows longevity, prosperity, healing, and wellness to continue (Gone, 2007; Gone, 2010). Regarding political reasons, Indigenous cultural practices in therapeutic settings represent a form of anti-colonial rejection and confirms the value and strength of Indigenous life. Regarding pragmatic reasons, participation in Indigenous cultural practices is believed to be the most valuable in assisting First Nations individuals due to the

power and long-standing nature of the traditions (Gone, 2013). Gone (2013) also posited that in therapeutic settings where Indigenous cultural practices are formally absent, "token gestures," such as the sweat lodge activities, may reassure First Nations individuals that mainstream treatment can be made culturally relevant for them. As well, Anderson (1993) has recommended that mainstream psychological techniques be combined with traditional values, spirituality, and activities that enhance self-esteem in order for treatment to be most valuable.

These recommendations suggest that for treatment to be culturally relevant does not require that treatment necessarily follow traditional practices. First Nations communities differ in their connection to culture (Jiwa, Kelly, & St. Pierre-Hansen, 2008), but even when mainstream treatment could be effective or is desired in a First Nations community, these services remain challenging to access due to the barriers previously mentioned (Chong & Herman-Stahl, 2003). Where traditional practices are desired by an individual seeking treatment, however, this is essential for treatment success. A scoping review by Rowan and colleagues (2014) found that addiction treatment programs with Indigenous cultural components have many positive results in all areas of the medicine wheel, which is important as rather than simply an absence of disease, health in First Nations populations can often be understood as a state of balance across the biological, psychological, social, and spiritual aspects of life (Dell et al., 2012). For example, one study found that those who relapsed to substance use had less engagement in traditional cultural practices compared to those who continued to abstain from substances (Boyd-Ball, Dishion, Myers, & Light, 2011), while another found that culturally based intervention was significantly more effective for reducing substance use and related problems than non-culturally based intervention (Lowe, Liang, Riggs, Henson, & Elder, 2012).

Indigenous elders and healers explain that the disconnection from culture, community, and spirituality is what makes people unhealthy (McCormick, 2000) and the greater degree of connection to culture that an Indigenous person has is a known protective factor associated with reduced rates of substance use, reduced rates of suicide, and improved mental health outcomes (Bals, Turi, Skre, & Kvernmo, 2011; Fleming & Ledogar, 2008; McIvor & Napoleon, 2009). When it comes to addiction, the use of substances is often considered a strategy to cope with the state of powerlessness and hopelessness that Indigenous peoples face in the loss of traditional cultural values through colonization (McCormick, 2000). Others also believe the abuse of substances to be a survival mechanism for Indigenous peoples whose culture and values have suffered due to assimilation (Pedigo, 1983). Because the disconnection from culture is believed to make people unhealthy, it is understandable that the connection to culture would be healing in some ways.

Treatment for Opioid-Related Disorders

Opioid dependent individuals often seek treatment as a transitional phase to help them through a particular time in their lives (Potik, Adelson, & Schreiber, 2007), however long-term substitution therapy (also called maintenance therapy, medication-assisted treatment, or opioid agonist therapy) is the most effective treatment for opioid-related disorders. Maintenance therapy involves replacing the harmful often illegal substance that is causing difficulties (e.g., heroin) with a safer, legal alternative (e.g., methadone; Ward et al., 1999). The individual in maintenance therapy becomes physically dependent on the maintenance medication, however once a dose is stabilized, intoxication and withdrawal occur infrequently (Ward et al., 1999). This type of treatment is known as a harm reduction strategy because the ultimate goal is a reduction in risky

behaviours and harm associated with the use of a substance, rather than complete abstinence (Rogers & Ruefli, 2004).

Relapse to illicit opioid use is a concern for those receiving long-term maintenance treatment, with relapse rates as high as 56% within the first year, after completing 3 years of treatment (Tang, Zhao, Zhao, & Cubells, 2006). Rather than a lack of will power, long-term depression, low energy, drug cravings, sudden attacks of withdrawal sickness, stress, and cumulative neurochemical changes to the brain are all reasons for relapse among past opioid users (Brown & Lawrence, 2009; Drug Policy Alliance, 2006; Sinha, Kimmerling, Doebrick, & Kosten, 2007). These relapse triggers diminish over time for some, but for others they do not (Drug Policy Alliance, 2006) making relapse monitoring necessary.

Methadone maintenance therapy. While methadone was once the gold standard in medication-assisted treatment for opioid related disorders, the invention of Suboxone (a tablet that combines buprenorphine and naloxone) is changing opioid treatment in some ways. Buprenorphine is the main component of this maintenance medication, but it is combined with naloxone to prevent abuse. It is also longer acting, which makes it effective when taken every other day or even less frequently (Jones, 2004). Both methadone and Suboxone have benefits, however Suboxone is quickly becoming the preferred choice, primarily for safety reasons (Canadian Agency for Drugs and Technologies in Health, 2016). New clinical practice guidelines released for opioid agonist therapy indicates Suboxone as the preferred first line for treatment when possible, as it has less potential for overdose or abuse, it can be taken at home minimizing lifestyle disruption related to having to visit a pharmacy daily, and the transition from Suboxone to methadone is relatively easy if necessary (Bruneau et al., 2018). Suboxone is most highly recommended for those who are socially stable and who are prescription opioid

users, as well as for those who are at a high risk of methadone toxicity (e.g., the elderly, those who have used high doses of benzodiazepines or other sedating substances, heavy drinkers, or those with a low level of opioid tolerance; Srivastava, Kahan, & Nader, 2017). With that being said, there are still particular circumstances when methadone should be prescribed first such as for those who are at a higher risk of dropping out of treatment (e.g., injection drug users), as well as youth, pregnant women, those who have unstable housing, those who have a lack of social support, and those who have concurrent mental illness (Srivastava et al., 2017). Methadone also generally has a higher treatment retention rate than Suboxone (Amato et al., 2005; Mattick, Breen, Kimber, & Davoli, 2014; Srivastava et al., 2017).

The elimination of illicit opioid use is the main goal of maintenance therapy, which has been shown to have numerous positive outcomes (Fullerton et al., 2014). The positive outcomes of methadone maintenance therapy are well represented in the literature and include:

- Reduced criminal activity (Ball, Lange, Myers, & Friedman, 1988; Dole & Nyswander, 1965; Fullerton et al., 2014; Joseph, Stancliff, & Langrod, 2000; Judson, Ortiz, Crouse, Carney, & Goldstein, 1980; McLellan, Lewis, O'Brien, & Kleber, 2000; Simpson, Joe, & Bracy, 1982; Ward et al., 1999);
- Reduced risks associated with injection drug use (e.g., reduction in shared needles; Ball et al., 1998; Capital Health, 2005; Chatham, Hiller, Rowan-Szal, Joe, & Simpson, 1999; Dolan et al., 2003; Metzger et al., 1993; Simpson et al., 1982; Stark, Muller, Bienzle, & Guggenmoos-Holzmann, 1996);
- Reduced spread of infectious diseases (e.g., HIV and hepatitis C; Abbott, Weller, Delaney, & Moore; 1998; Avants et al., 1999; Ball et al., 1998; Fullerton et al., 2014; Gibson, Flynn, &

McCarthy, 1999; Joseph et al., 2000; McLellan et al., 2000; Simpson et al., 1982; Ward et al., 1999; White, Dore, Lloyd, Rawlinson, & Maher, 2014);

- Decreases in multiple sex partners or exchanges of sex for drugs (Camacho, Bartholomew, Joe, Cloud, & Simpson, 1996; Chatham et al., 1999; Grella, Anglin, Rawson, Crowley, & Hasson, 1996);
- Reduced mortality (Caplehorn, Dalton, Cluff, & Petrenas, 1994; Fullerton et al., 2014; Joseph et al., 2000);
- Less substance use in general (Capital Health, 2005; Dole & Nyswander, 1965);
- Normalization of physiological functions (e.g., stress responses of the central nervous system, ability to experience normal emotions and pain; Joseph et al., 2000); and
- Improved life functioning (Capital Health, 2005; Dole & Nyswander, 1965; Judson et al., 1980; Simpson et al., 1982; Ward et al., 1999).

In order for treatment to be most effective, however, supplementary psychosocial services should be offered with a methadone prescription (Centre for Addiction and Mental Health, 2016; National Institutes of Health, 1999). Methadone maintenance therapy has the highest probability of being effective when social, medical, and psychological services are provided as well (Centre for Addiction and Mental Health, 2016; Islam, Taylor, Smyth, & Day, 2013; McLellan, Arndt, Metzger, Woody, & O'Brien, 1993; National Institutes of Health, 1999). Additionally, appropriate dosing and assistance with tapering off the maintenance medication are present in the strongest substitution programs (D'Aunno, Pollack, Frimpong, & Wuchiett, 2015; Nosyk et al., 2012).

Particularly in programs where large proportions of patients represent cultural minorities (e.g., African-American, Hispanic) and in private (for profit) and public organizations, patients

tend to report low-dose care and 23% of patients across the United States are receiving doses that are too low to be effective (D'Aunno et al., 2015; D'Aunno, Park, & Pollack, 2019). Additionally, many prescribing physicians discourage their patients from tapering off of methadone, explaining that tapering is difficult, and while true, Nosyk and colleagues (2012) found that 13% of tapers had been successful and that longer tapers have higher odds of success. Specifically, gradual stepped tapering with dose decreases occurring once or twice per month had the greatest chance of sustained success (Nosyk et al., 2012). New clinical practice guidelines suggest that should an individual wish to discontinue maintenance medication after a prolonged period of success in treatment (i.e., longer than one year), tapering off of methadone should occur slowly and over a time period of greater than one month (Bruneau et al., 2018).

Methadone Maintenance Therapy for First Nations Populations

Indigenous identification has been consistently associated with a lower likelihood of initiating methadone maintenance therapy (Kerr, Marsh, Li, Montaner, & Wood, 2005), which is likely due to treatment access issues (i.e., financial, geographic, and cultural barriers; Chong & Herman-Stahl, 2003). Within remote First Nations communities, the current model for substance abuse treatment involves referral to residential treatment centers for three to six weeks (Chong & Herman-Stahl, 2003; Wiebe & Huebert, 1996). Travelling from remote communities is often difficult, and when individuals are able to receive treatment away from home, they are commonly unable to continue on their maintenance medication when they return home due to difficulties acquiring the medication (Chong & Herman-Stahl, 2003). Methadone maintenance treatment requires medical supervision, which means that only communities with resident physicians will have the availability to offer local methadone prescriptions; unfortunately, individuals who wish to continue treatment often have to relocate to areas where prescribing

physicians are available (Webster, 2013). The First Nations and Inuit Health Branch of Health Canada covers the cost of transportation to and from pharmacies for those beginning methadone maintenance therapy for up to 4 months, until the individual is stabilized and permitted to have take-home doses, also known as "carries" (Eibl et al., 2015; Luce & Strike, 2011). This however, means that on average, rurally located individuals have to travel over 100 km (each way) per day for 4 months. After the 4-month stabilization period has occurred, individuals have to continue making this trip once per week as it is common practice to only provide six take home doses at a time (Eibl et al., 2015; Luce & Strike, 2011). As well, policies of most provinces, indicate 8 months to achieve stabilization prior to being given six take home doses (Eibl, Morin, Leinonen, & Marsh, 2017) and the clinical practice guidelines suggest that individuals continue with supervised ingestion indefinitely, particularly for those with ongoing substance use, and clinical or social instability (Bruneau et al., 2018).

Due to these issues and little or no aftercare, relapse rates among Indigenous individuals are 35-85%, with relapse most often occurring within 90 days (Chong & Herman-Stahl, 2003; Wiebe & Huebert, 1996). Recent studies investigating retention in culturally appropriate maintenance programs in northwestern Ontario found that treatment retention rates were 84%, 78%, and 72% at six, 12, and 18 months respectively, which are higher than both methadone and Suboxone program retention rates among Indigenous individuals in the rest of Canada and the United States (Mamakwa et al., 2017). Mamakwa and colleagues (2017) estimated 24-month retention rates to be over 70%. Another study noted that those in Northern Ontario are more likely to remain in treatment compared to those in southern Ontario, perhaps due to having greater difficulty accessing services and therefore having greater motivation to remain in treatment once they are admitted to a program (Eibl et al., 2015; Eibl et al., 2017).

While methadone maintenance programs are the most effective treatment option for the general population in Canada, efforts to overcome treatment barriers are necessary to have treatment successes extend to Indigenous populations. A combined publication from Health Canada, the National Native Alcohol and Drug Abuse Program, and the Assembly of First Nations (2011) titled *Honouring Our Strengths* identifies the keys to reducing substance abuse in First Nations communities as providing effective healing programs and reclaiming cultural identity. Culturally relevant programs are being set in place to address prescription drug abuse in First Nations communities involving multi-sectoral collaboration, research and surveillance, demand reduction, supply reduction, and treatment (Health Canada et al., 2011). *Honouring Our Strengths* has identified a goal of matching people affected by substance use issues to the appropriate services and supports they require at the specific time in their journey that they require them (Health Canada et al., 2011). *Honouring Our Strengths* also aims to coordinate among sectors to provide effective, client-centered, and culturally safe services and supports (Health Canada et al., 2011). With these goals at the heart of program development, culturally appropriate methadone maintenance treatment programming is likely to have greater success with Indigenous populations.

Cree Nations Treatment Haven

Established in 1986 as a fully accredited addiction service centre, Cree Nations Treatment Haven (CNTH) is the first methadone maintenance therapy program to be offered in a First Nations community in Canada. It is located in Ahtahkakoop Cree Nation in Canwood, Saskatchewan. Ahtahkakoop Cree Nation has a population of 1,101 (Statistics Canada, 2006) and is located 72 km northwest of Prince Albert and 165 km south of Saskatoon. CNTH believes that individuals have the right to be respected as unique individuals, to freedom of expression,

and to autonomy. CNTH invites individuals to take a personal journey to rediscover a life that is free from alcohol and drugs in their caring environment, while taking responsibility for their actions. CNTH is a 20-bed facility that runs a 5-week inpatient program, a 16-week outpatient Matrix program, and other culturally relevant programs such as sweats and church services, to assist in the full recovery of clients (Ahenakew, 2012; Andkhoie, 2012). The centre focuses on four partnering bands (Ahtahkakoop Cree Nation, Pelican Lake, Witchekan Lake, and Big River), but has clients from several other First Nations communities; clients are not required to be First Nations or a resident of any of the four bands to access services (Andkhoie, 2012).

CNTH has partnered with the First Nations and Inuit Health Branch, provincial and regional health authorities, and the College of Physicians and Pharmacists to ensure that while services are culturally appropriate, quality is not compromised (Andkhoie, 2012). The services offered aim to balance each component of the First Nations medicine wheel through the use of traditional sweats, smudging, drumming, and art, among other cultural activities (Andkhoie, 2012). CNTH also supports individuals who identify more closely with non-traditional spiritual services by connecting them with the services of other requested religious denominations as necessary.

The methadone maintenance treatment program at CNTH began in January 2011 and was developed with the help of the community and through evidence-based approaches demonstrating the importance of culturally appropriate treatment (Andkhoie, 2012). Since 2012, a small proportion of CNTH's clients have been prescribed Suboxone rather than methadone. Prior to entering the program, individuals are assessed for appropriateness for the program by the case coordinator. If deemed appropriate for the program, individuals are evaluated by the on-site physician who prescribes a starting dose of methadone or Suboxone. If an individual does not

qualify for the methadone maintenance program, they are provided with alternate service options to aid in their recovery. After beginning maintenance treatment, individuals are expected to initiate regular counselling either through the Matrix program, weekly Narcotics Anonymous meetings, individual counselling, or through weekly sweat lodge and healing/sharing circles.

CNTH's Matrix program. The Matrix Model of Intensive Outpatient Alcohol and Drug Treatment is a program that addresses some of the additional needs of individuals receiving methadone maintenance therapy by combining multiple evidence-based practices such as cognitive-behavioural strategies, relapse prevention, motivational interviewing strategies, psychoeducation, and 12-step program involvement, into an outpatient program (Rawson & McCann, 2005). The traditional Matrix program is 16 weeks, with structured group sessions and some individual sessions, and individuals are required to undergo weekly urine testing and are also highly encouraged to attend weekly support groups, as this group cohesion and support is instrumental in ensuring continued program adherence (Rawson & McCann, 2005). The program is guided by the principles of building a positive and collaborative relationship with the individual, creating structure and expectations, positively reinforcing behaviour change, and educating family regarding the expected course of recovery so that they may serve as supports (Jackson, Dykeman, Gahagan, Karabanow, & Parker, 2011; Rawson & McCann, 2005). The Matrix program has shown significantly higher retention, completion, and drug-free samples per week when compared to other usual treatments (Rawson & McCann, 2005).

CNTH has taken the evidence-based Matrix model and adapted it to best fit the culture, values, and needs of its clients (Ahenakew, 2012). The program is more compressed than the original model, running daily for 6 weeks, but maintains the same number of overall sessions (Ahenakew, 2012). This new schedule was adopted at the request of clients in order to facilitate

full immersion in the program and permit the provision of additional programming throughout the day (Ahenakew, 2012). Through group sessions, the clients progress from developing early recovery skills (10 sessions), to relapse prevention (13 sessions), then to family education (15 sessions), culminating with a final follow-up and graduation (two sessions; Ahenakew, 2012).

Past program evaluation. In 2012, an evaluation of the first 15 months of operation of CNTH was completed. This evaluation found that 53 clients went through the program and that 82 requests were received, placing 29 clients on the waitlist (Andkhoie, 2012). These numbers immediately indicated an interest and need for services. The methadone maintenance therapy program was found to drastically decrease opioid use among clients: 82% terminated use (Andkhoie, 2012). Unfortunately, rates of reduction in substance use were not formally collected during this evaluation, but it was determined that upon completion of the evaluation, most clients used at least one less opioid, one less stimulant, and 1.5 less depressants than they were using before beginning treatment (Andkhoie, 2012). Additionally, few clients (5.3%) were involved in any form of illegal activity during a 30-day follow-up period (Andkhoie, 2012). Overall, the results of this evaluation were positive, but limited, and further evaluation was requested.

In 2015, a second evaluation was completed that aimed to evaluate the program from the clients' perspectives. Thirty clients receiving maintenance treatment at CNTH participated in the study ranging in age from 23 to 55 ($M = 41$). Most of the clients were male ($n = 16$; 53.3%), and 93.3% ($n = 28$) identified as First Nations. Results of this evaluation indicated that individuals in treatment with high self-rated improvement, showed greater engagement in their treatment, greater life quality, healthier psychological functioning and physical health, improved relationships with family and friends, and a more positive opinion of the services. Additionally, those with high self-rated improvement showed less psychological distress, decreased problems

with alcohol and criminality, less employment and life difficulties, and less overall risk. These results indicate that those who rated themselves as improved also experienced increases and decreases in notable areas of their lives. Eighty percent of clients reported a decrease in drug use and high-risk behaviours, 70% reported that their housing condition had improved, 56.7% reported an improvement in employment status, and 76.7% reported an increase in family support since admission to the program. These results showed that the program was succeeding in many ways in the eyes of the clients, but further evaluation was requested that explored the same outcomes over time, with the addition of an exploration of the importance of culture to the clients. The centre was also interested in the perspectives of the staff on successes and areas for improvement.

The Current Study

Based on the ongoing need for evaluation, the requests of the treatment centre, and the literature, a plan for longitudinal evaluation was developed. The high rates of opioid abuse and related morbidity and mortality among First Nations individuals combined with the need for culturally relevant treatment, indicated the necessity of ongoing program evaluation. To extend on past evaluation conducted at CNTH, longitudinal evaluation at two time points was conducted (Part 1 and Part 2). From the quantitative data it was hypothesized that:

1. individuals in the methadone maintenance treatment program at CNTH will improve (or remain stable) between Part 1 and Part 2 in both their self-rating of improvement and in the clinician-rating of improvement. Additionally, quality of life, an important objective of the treatment centre and indication of client success, will improve (or remain stable) between time points.

    b. ratings of improvement will be positively associated with ratings of support for the

program for both Part 1 and 2.

2. symptoms of anxiety and depression, and physical and psychological health concerns will decrease or remain stable between Part 1 and Part 2.
3. rates of drug-use and high-risk behaviours of clients will decrease or remain stable between Part 1 and Part 2 and housing conditions, employment status, and family support will increase or remain stable between Part 1 and Part 2.
4. client's rating of their connection with Indigenous culture will be positively associated with their engagement in treatment and with their self-rated improvement for both Part 1 and 2.
5. client's rating of their connection with Indigenous culture will be positively associated with their ratings of support for the program for both Part 1 and 2.

The qualitative data was collected for the purpose of gathering information, therefore hypotheses were not made.

Method

Participants

Participants in this evaluation consisted of 49 clients who were currently prescribed either methadone or Suboxone at CNTH. Clients ranged in age from 22 to 61, with a mean age of 40 (*SD* = 10.38). Just over half of the clients were female (*n* = 25; 51%), and 100% (*n* = 49) identified as First Nations, with 57.1% (*n* = 28) also identifying as Cree. At Part 1, the majority of clients were single (*n* = 20; 43.5%) or cohabiting (*n* = 10; 21.7%), and lived with family or relatives (*n* = 25; 54.4%) or alone in their own dwelling (*n* = 15; 32.6%). The majority completed some high school (*n* = 18; 39.1%), completed high school (*n* = 9; 19.6%), or completed some post-secondary school (*n* = 9; 19.6%). At Part 2, the majority of clients were single (*n* = 10; 34.5%) or married (*n* = 6; 20.7%), and lived alone in their own dwelling (*n* = 13;

44.8%) or with family or relatives (*n* = 11; 37.9%). The majority completed some high school (*n* = 14; 48.3%) or they completed high school (*n* = 6; 20.7%).

Interviews were conducted with 11 staff members at the treatment centre. These staff members were employed in various positions within the treatment centre including kitchen staff, security, maintenance, counsellors, intake workers, receptionists, finance workers, psychologists, and the program director.

Procedures

This project began when CNTH contacted Dr. Christopher Mushquash (the researcher's supervisor) to request assistance in evaluating their methadone maintenance therapy program. The researcher was invited to assist in this evaluation of the program. CNTH provided information regarding their hopes for the evaluation and an advisory board was created which included members from CNTH's board of directors (some of whom have lived experience with substance abuse), the community (some of whom have participated in and completed the methadone maintenance treatment program at CNTH), the First Nations and Inuit Health Branch, and a methadone prescribing physician. All parts of this project were designed and implemented with full involvement of this advisory board from the creation of questionnaire packages to research dissemination. A written agreement was created outlining the project and its objectives, identifying the various partners, identifying who can use the information produced from the project, and describing how CNTH's clients' privacy and confidentiality would be protected. This agreement ensured that the research conducted followed Chapter 9 of the *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans, on Research Involving the First Nations, Inuit and Métis Peoples of Canada*, which has been created to ensure that research relationships remain respectful with Indigenous groups (Government of Canada, 2018).

Throughout history, research involving Indigenous peoples in Canada has been identified and conducted primarily by non-Indigenous researchers and the research methods used in the past have not generally reflected Indigenous world views (Government of Canada, 2018). As well, the research conducted has not necessarily benefited Indigenous peoples or communities in the past, but this ethical conduct policy aims to change this (Government of Canada, 2018). The written agreement created for this project mentioned the requirement for the project to undergo Research Ethics Board review at Lakehead University, where the project was approved.

The type of research being conducted is known as Participatory Action Research, which is a research method involving both participants and researchers throughout the process from the initial stages of project development, to gathering data and disseminating results (Danley & Ellison, 1999; Watters, Comeau, & Restall, 2010). Participatory Action Research is a unique approach to research because it aims to have power shared between all team members, in an attempt to eliminate the inequality that traditionally occurs between researchers and participants in research (Danley & Ellison, 1999; Watters et al., 2010). As well, participants are regarded as experts due to their lived experiences related to the research topic, therefore involving participants in the creation of research ensures that relevant issues are being studied (Danley & Ellison, 1999; Watters et al., 2010).

The creation of this project involved multiple trips to Ahtahkakoop Cree Nation by both Dr. Mushquash and the researcher to meet with the advisory board to plan the project. During these meetings, information was gathered on expectations and plans were made, but a trusting research relationship was also developed. It was important that the treatment centre felt comfortable with the researchers' intentions and with the researchers visiting the community several times over the coming years. After the initial plans were developed, communication

continued via telephone and email with the treatment centre's director, and she maintained ongoing contact with the advisory board about the research project.

Prior to visiting the treatment centre to begin data collection, a team of graduate level research assistants (who were completing either a Master's or Ph.D. in Clinical Psychology) was developed. These research assistants were required to complete the TCPS 2 Ethics Certificate and were required to review Chapter 9 of the Tri-Council Policy Statement on Research Involving the First Nations, Inuit and Métis Peoples of Canada. The research assistants were members of the Substance Use Research Group (SURG) laboratory at Lakehead University and were selected based on their proven level of respect and knowledge of Indigenous research practices and their ability to develop rapport with participants, which the researcher was able to determine based on her membership in the SURG laboratory as well. These research assistants had some knowledge about the research project since its development and were involved in consultation on the project throughout the process by way of laboratory presentations and discussions. Over the course of this project, five research assistants were trained in the data collection procedure required. The data collection procedure involved three week-long trips to CNTH (December 4-10, 2016; August 14-18, 2017; May 14-18, 2019), organized by the researcher in collaboration with the treatment centre's director. On each of these trips, the researcher and three research assistants travelled to Ahtahkakoop Cree Nation and visited the treatment centre on a daily basis for 5 days where data was collected based on the following procedure.

Clients of CNTH visit the treatment centre on a daily basis to receive their medication. During one of their daily visits, clients were informed of the details of this project by the researchers, were provided a cover letter to read, and were permitted to ask questions regarding

their participation. Clients, if they chose to participate, were asked to sign an informed consent form, and then completed a series of questionnaires related to demographic information, social functioning, health status, drug and alcohol use, criminal involvement, engagement, satisfaction of services, impression of improvement, quality of life, and cultural connectedness.

These clients were at various stages in treatment, but were asked to report when their treatment began. Four clients began treatment in 2017 (8.2%), seven began in 2016 (14.3%), six began in 2015 (18.4%), seven began in 2014 (14.4%), four began in 2013 (8.2%), five began in 2012 (16.7%), three began in 2011 (6.2%), and two began prior to 2010 (4.1%)[2]. Two clients were unsure of when they began treatment (4.1%).

The questionnaires completed were paper-and-pencil format and were completed on average, within 90 to 120 minutes. Clients were encouraged to complete the questionnaires on site, however when requested, clients were permitted to take the questionnaires home for completion. Upon completion, clients returned their surveys to the researchers who thanked them for their time and provided them with resources should they require mental health services. Approximately nine months later (*M* = 283 days, *SD* = 73.42) clients were asked to complete a portion of the questionnaires again, following the same procedure. A number of questionnaires were removed from this second questionnaire package to save clients time as the first package was determined to be quite lengthy. Following the completion of this second questionnaire package, clients were offered a $10 gift card to either Dollarama or Walmart as a small thank you for their participation. Because clients' surveys were required to be connected between the

[2] CNTH began its methadone maintenance therapy program in January 2011; however, it is possible and likely that these clients began methadone treatment elsewhere prior to CNTH's methadone maintenance therapy program development.

two time periods, participants were assigned an ID number. This ID number was solely required to allow for appropriate data analysis and was not used to identify participants for any other reason. The list of ID numbers and names was kept in a locked filing cabinet that was only accessible to the researchers and will be destroyed once the study is completed.

Staff at CNTH were informed of the details of this project by the researchers and were provided a cover letter to read. Staff, if they chose to participate, were asked to sign an informed consent form. This consent form also asked staff for their permission to be audio taped during the interview. They were then interviewed individually by one or two researchers regarding their experiences with the treatment centre in approximately 30-minute meetings. The questions asked during these interviews were developed by the researchers based on requests from CNTH's leadership team who reviewed the questions after creation and provided approval to proceed (Appendix A). Upon completion of the interview, staff were debriefed and offered resources if they required mental health services. Staff members were also assigned an ID number for the purpose of information verification if necessary.

Measures

A demographic questionnaire was created for clients to complete to obtain information regarding age, sex, ethnicity, relationship status, level of education, and living situation. The demographics questionnaire also included questions asking the date of treatment entry, and whether they were part of the Matrix program. If they are/were in the Matrix program, they were asked to include the date they enrolled in and completed the program as well. This questionnaire was included in both the Part 1 and Part 2 questionnaire packages. This questionnaire can be viewed in Appendix B along with all measures to follow.

Cultural Connectedness Scale (Snowshoe, 2015). This is a 29-item self-report questionnaire that measures cultural connectedness on three dimensions; identity, traditions, and spirituality. Items are scored on either "yes" or "no" scales, or on 5-point scales with response options ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). Statements on this scale include things like "I have participated in a cultural ceremony (examples: Sweatlodge, Moon Ceremony, Sundance, Longhouse, Feast, or Giveaway)" and "I feel a strong connection to my ancestors." This measure has good criterion validity between cultural connectedness and well-being indicators (Snowshoe et al., 2012). This questionnaire was included in both the Part 1 and Part 2 questionnaire packages.

Life Situation Survey (LSS; Chubon, 1999). This is a 20-item self-report questionnaire that asks clients about their current life situation. Items are scored on a 7-point scale with response options ranging from 1 (Agree Very Strongly) to 7 (Disagree Very Strongly). Statements on this scale include things like "My income is a constant source of worry" and "I like myself the way I am." The reliability and validity of this measure have been supported by many studies and the internal consistency of the rating scale items are at acceptable levels with diverse populations (Chubon, 1999). It also shows appropriate inter-item consistency (α = .74 - .95) and is sensitive to both health and non-health factors affecting quality of life (Chubon, 1999). This questionnaire was included in both the Part 1 and Part 2 questionnaire packages.

TCU Client Evaluation of Psychological Functioning (PSY; Garner, Knight, & Simpson, 2007; Joe, Broome, Rowan-Szal, & Simpson, 2002). This is a 33-item self-report questionnaire that asks clients about their psychological functioning over the past month. Items are scored on a 5-point scale with response options ranging from 1 (Disagree Strongly) to 5 (Agree Strongly). Questions on this scale include things like "You feel interested in life" and

"You feel hopeless about the future." This scale is broken down into five subscales including self-esteem, depression, anxiety, decision-making, and expectancy. This measure has good internal consistency (α = .71 - .81; Simpson, Joe, Knight, Rowan-Szal, & Gray, 2012) and is reliable for use in treatment programs (Joe et al., 2002). This questionnaire was included in both the Part 1 and Part 2 questionnaire packages.

TCU Physical and Mental Health Status Screen (HLTH; Joe, Simpson, Greener, & Rowan-Szal, 2004). This is a 21-item self-report questionnaire that asks clients about physical and mental health issues over the past month. The first question asks "How many times in the past month have you gone to a hospital or clinic or seen a doctor or nurse for health problems?" with response options of 0 (None), 1 (1 time), 2 (2-3 times), 3 (4-10 times), or 4 (over 10 times). The next 10 questions ask about problems and diseases experienced in the past month, such as "Stomach problems or ulcers" and "Skin disease or skin problems" and these items are rated on a 5-point scale with response options ranging from 0 (None of the time) to 5 (All of the time). These 11 questions make up the physical health subscale. The last 10 questions ask how often in the past month feelings such as being nervous or depressed were felt, and these items are rated on the same 5-point scale mentioned above. These questions make up the psychological distress subscale. This measure has high levels of reliability and validity in groups of injection drug users (α = .84 - .89; Hides et al., 2007). This questionnaire was included in both the Part 1 and Part 2 questionnaire packages.

TCU Family and Friends Assessment (FMFR; Joe et al., 2004). This is a 21-item self-report questionnaire that asks clients about their relationships with family and friends in the past month. Items are scored on a 5-point scale with response options ranging from 1 (Disagree Strongly) to 5 (Agree Strongly). Statements on this scale include things like "Your family got

along well together" and "Your friends usually worked regularly on a job." This scale is broken into four subscales including family relationships, family drug use, peer socialization, and peer criminality. This measure has good reliability and validity (α = .78; Joe et al., 2004). This questionnaire was only included in the Part 1 questionnaire package.

TCU Alcohol Use and Problem Symptoms (ALC; Joe et al., 2004). This is a 15-item self-report questionnaire that asks clients about their alcohol use and problem symptoms over the past month. The first four questions are about weekly alcohol use and include things like, "On average, how many days each week did you ever have 5 or more drinks in a row," which are rated on a 5-point scale from 0 (0 days per week) to 5 (7 days per week). The next 11 questions are Yes or No questions and ask if in the past month the client's alcohol use ever led to things like "Fights or arguments with family or friends" and "Craving or having strong urges to take a drink." Self-report measures of alcohol consumption and related activities have been found to be reasonably valid and reliable (Del Boca & Darkes, 2003). This questionnaire was only included in the Part 1 questionnaire package.

TCU General Crime, Employment, and Life Status (CEL; Joe et al., 2004). This is a 10-item self-report questionnaire measuring risks associated with crime, employment, and life status over the past month. The first seven items ask questions such as "On average, how many days each week did you ever get into fights or loud arguments?" and are scored on a 5-point scale with response options ranging from 0 (0 days per week) to 5 (7 days per week). The final three items ask questions such as "How many times were you arrested?" scored on a 5-point scale with response options ranging from 0 (0-2 times) to 5 (11+ times). This scale is broken into four subscales including crime problems, employment problems, life status problems, and CEL total. Self-report measures of criminal behaviour and activity have been found to have high

reliability (Darkes, 1998; Thornberry & Krohn, 2000). This questionnaire was only included in the Part 1 questionnaire package.

TCU Client Evaluation of Social Functioning (SOC; Garner et al., 2007; Joe et al., 2002). This is a 36-item self-report questionnaire that asks clients about their level of social functioning over the past month. Items are scored on a 5-point scale with response options ranging from 1 (Disagree Strongly) to 5 (Agree Strongly). Questions on this scale include things like "You have people close to you who can always be trusted" and "You like others to feel afraid of you." This scale is broken into four subscales including hostility, risk taking, social support, and social desirability. This measure has good internal consistency ($\alpha = .71 - .88$; Simpson et al., 2012) and is reliable for use in treatment programs ($\alpha = .89$; Joe et al., 2002). This questionnaire was only included in the Part 1 questionnaire package.

TCU Global Risk Assessment - Adult (RSK; Joe et al., 2004). This is an 11-item self-report questionnaire measuring global risk over the past month. The first item asks "How much of the time in the past month were you locked up?" and the following 10 questions ask a variety of Yes or No questions about the past month including things like, "Were you ever employed full time?" and "Were you ever treated in an emergency room?" This measure has acceptable test-retest reliability and good internal consistency ($\alpha = .77 - .96$; Bernstein et al., 2010; Broome, Joe, & Simpson, 2001). This questionnaire was only included in the Part 1 questionnaire package.

Addiction Prevention and Treatment Services' Methadone Evaluation Questionnaire (MEQ; Capital Health, 2005). This is a 13-item self-report questionnaire that asks a variety of questions, mostly with Yes or No options, on the subjects of drug use/high risk behaviours, housing, employment status, criminal convictions, and family. This questionnaire was included in both the Part 1 and Part 2 questionnaire packages.

Verona Service Satisfaction Scale for Methadone Treatment (VSSS-MT; Pérez de los Cobos et al., 2002). This is a 17-item self-report questionnaire that asks about the experience in using the treatment centre's methadone maintenance therapy program over the past month. Questions are rated on a 5-point scale with response options ranging from 1 (Terrible) to 5 (Excellent). Some questions also include an option for Not Applicable. Questions include things like, "What is your overall feeling about the effect of the program in helping you deal with your problems?" and "What is your overall feeling about the effectiveness of the program in helping you to improve your relationships with your close relatives?" This measure has excellent internal consistency, good test-retest reliability, and good concurrent validity (α = .85 - .92; Pérez de los Cobos et al., 2002). This questionnaire was only included in the Part 1 questionnaire package.

TCU Client Evaluation of Treatment Engagement (ENG; Garner et al., 2007; Joe et al., 2002). This is a 36-item self-report questionnaire that asks about the level of treatment engagement over the past month. Items are scored on a 5-point scale with response options ranging from 1 (Disagree Strongly) to 5 (Agree Strongly). Questions on this scale include things like "Your treatment plan has reasonable objectives" and "The staff here are efficient at doing their job." This scale is broken into four subscales including treatment participation, treatment satisfaction, counselling rapport, and peer support. This measure has good internal consistency reliability (α = .77 - .93; Simpson et al., 2012) and is reliable for use in treatment programs (Joe et al., 2002). This questionnaire was only included in the Part 1 questionnaire package.

Patient Global Impression of Improvement scale (PGI; Trujols et al., 2011). This is a one-item self-report measure that asks, "Compared to your condition at admission to the centre, how much have you changed?" The answer is rated on a 7-point scale, with response options ranging from 1 (Very much improved) to (Very much worse). This measure has demonstrated

good test-retest reliability and concurrent validity (α = .85; Srikrishna, Robinson, & Cardozo, 2010). This questionnaire was included in both the Part 1 and Part 2 questionnaire packages.

Client Global Impression of Improvement scale (CGI; Guy, U.S. Department of Health, Education, and Welfare, Public Health Service, Alcohol, Drug Abuse, and Mental Health Administration, 1976; Trujols et al., 2011). This is a one-item clinician completed measure. Referring to the individual receiving treatment, the question asks, "Compared to his/her condition at baseline, how much has he/she changed?" The clinician is asked to rate only the improvement that they feel is due entirely to the drug treatment. The answer is rated on a 7-point scale, with response options ranging from 1 (Very much improved) to (Very much worse). This measure has shown good psychometric properties (Guy et al., 1976). This questionnaire was included in both the Part 1 and Part 2 questionnaire packages.

Patient Opinion of Services (POS; Pérez de los Cobos, Trujols, Valderrama, Valero, & Puig, 2005). This is a one-item self-report measure that asks, "Taking into account your overall experience, what is your impression about methadone as a medication for carrying out maintenance treatment of opioid dependence?" This question is rated on a 5-point scale with response options ranging from 1 (Terrible) to 5 (Excellent). This questionnaire was included in both the Part 1 and Part 2 questionnaire packages.

Open Forum Questions (Capital Health, 2005). Clients who are receiving treatment have the opportunity to write their comments about things they have liked about their experience and things they have disliked about their experience. These questions were intended to be as open ended as possible so that clients were not guided in any way to discuss specific factors of the program that they liked or disliked. This questionnaire was included in both the Part 1 and Part 2 questionnaire packages.

Staff Interview Questions. Staff were asked about their experience at the treatment centre and to provide feedback on the program.

Data Analysis

Quantitative analyses. Hypotheses 1 and 2 were analyzed using IBM SPSS 25, first through paired *t*-tests to examine differences between Part 1 and Part 2 means. Next, these hypotheses were analyzed through equivalence testing to examine equivalence between Part 1 and Part 2 means. Equivalence testing is used to determine whether an observed effect is quite small as a variation to null-hypothesis testing, which allows for a rejection of a value other than zero (Lakens, 2017; Lakens, Scheel, & Isager, 2018). It is used when researchers wish to present the absence of an effect that is large enough to be worthwhile to examine, essentially, testing for equivalence (Lakens, 2017; Lakens et al., 2018). This analytical procedure followed Lakens and colleagues' (2018) recommendations for the two one-sided tests (TOST) procedure for psychological research, which looks at both differences and equivalences in research study data. The TOST procedure was performed through an Excel spreadsheet created by Lakens (2017).

The first component of equivalence testing involves determining the smallest effect size of interest (SESOI), which is most appropriately determined by either examining similar past research or by focusing on the research question. Since this research is unique and other similar studies do not report SESOIs, this SESOI was determined from the research question. In this case, because the sample size potentially included all of the clients at CNTH and could therefore not be adjusted, the SESOI was calculated from the alpha level and planned sample size, resulting in a suggested SESOI of $d_z = 0.32$.

Hypotheses 1b, 4, and 5 were analyzed using IBM SPSS 25 through separate bivariate correlations for Part 1 and Part 2. Finally, hypothesis 3 was analyzed through descriptive analyses and rates were presented for both Part 1 and Part 2.

Qualitative analyses. Qualitative analyses followed a mixed-methods approach, which was informed by the Western approach of grounded theory within an Indigenous inquiry framework (Creswell, 2013; Kovach, 2010). In this context, analysis involved reducing the whole to the sum of its parts by grouping data with the purpose of illustrating themes (Kovach, 2010). Grounded theory involves the attempt to understand a process by investigating the data of participants who have experienced the process (Creswell, 2013). Within grounded theory, data analysis involves various levels of coding and thematic analysis leading to the proposal of theoretical models (Boyatzis, 1998; Creswell, 2013), while Indigenous inquiry involves interpretive meaning-making by subjectively accounting for social phenomena (Kovach, 2010). Meaning-making also includes clarity regarding who the research is to benefit, while recognizing the implications and accepting responsibility for the knowledge that is being constructed (Kovach, 2010; Potts & Brown, 2005). Based on these approaches, qualitative client survey data responses were entered into NVivo; responses were then chunked into smaller units, coded, and finally, grouped into common themes and quantified. From the staff interviews, responses were audio recorded and manually transcribed. Using NVivo software, interview responses were chunked into smaller units, coded, and then grouped into common themes and quantified.

Social location of researcher. Since the knowledge emerging from qualitative research is filtered through the eyes of the researcher, as qualitative research is interpretive and subjective, the stories of both the researcher and the participants are involved in the meanings being made (Kovach, 2010). Because of this, it is useful to have the researcher's social location and intention

stated upfront (Kovach, 2010). The researcher of this project grew up in a single-parent, low income, Caucasian family with Western European ancestry. She was born and raised in a knowledge- and technology-based city in Southern Ontario in close proximity to an urban First Nations reserve, however she had very limited awareness and knowledge of Indigenous social issues and the related historical context. In relocating to Thunder Bay to pursue graduate education, she became acutely aware of the social issues faced by First Nations populations and of the historical context through the assistance and supervision of Dr. Mushquash (an Indigenous researcher) and his research laboratory.

Throughout this process, the researcher began to seek opportunities to assist in research with First Nations populations and she has continued to attempt to gain further understanding of the challenges that Indigenous populations face, particularly in relation to substance abuse and treatment. Through the mentorship she has received from Dr. Mushquash she has been afforded opportunities to work with multiple First Nations communities on various projects, which have influenced her own identity as a Canadian. She quickly became aware of her privilege as a researcher and she continues to reflect on her position within the cross-cultural relationships she enters, with an intention of maintaining high ethical standards and conducting research in a way that is beneficial to the communities/partners involved. Additionally, the researcher's experience has formed a strengths-based approach to both research and clinical work, which may influence her subjective evaluation of research findings.

Dependability, credibility, and trustworthiness. While qualitative research continues to be critiqued due to issues such as reliability and validity, it is becoming a widely accepted standard for psychological research (Creswell, 2013). One of the strengths of qualitative research is the level of subjectivity permitted due to the interpretation that occurs during data analysis

(Creswell, 2007). Within qualitative research, the terms dependability and credibility are often interchanged with the terms reliability and validity, which can be established by various strategies such as prolonged engagement in the field; triangulation of data sources, methods, and investigators; description; clarifying research bias; and auditing of the research process (Creswell, 2013; Lincoln & Guba, 1985; Nowell, Norris, White, & Moules, 2017). Creswell (2013) argues that at least two of these strategies should be present in qualitative research studies to ensure dependability and credibility. For the current project, triangulation occurred through peer review where the supervisor evaluated research methods, meanings, and interpretations throughout the process. As well, clarification of the researcher's research bias was mentioned above. Additionally, subjective bias was present based on the researcher's non-Indigenous status while interpreting the experience of substance abuse in a vulnerable and marginalized population, and in the relationship that developed between the researcher and the participants.

The trustworthiness of qualitative research findings is generally evaluated according to the trustworthiness of the methodology used for analyzing data (Creswell, 2007; Kovach, 2010; Nowell et al., 2017). Qualitative research must be conducted rigorously and methodically to produce meaningful results and researchers must demonstrate that data analysis was conducted in a precise and consistent manner (Nowell et al., 2017). The analysis in this study was conducted methodically as mentioned above and the procedure was thoroughly recorded and evaluated throughout analysis.

Results

Paired *t*-Tests and Equivalence Testing

The relationships between Part 1 and Part 2 self-rated improvement, clinician rated improvement, quality of life, symptoms of anxiety and depression, and physical and

psychological health concerns were analysed using paired *t*-tests and equivalence testing. Overall, no significant results were observed for the paired *t*-tests (see Table 1) or the equivalence tests (see Table 2), indicating that Part 1 scores were neither statistically different nor statistically equivalent to Part 2 scores. While results were not statistically significant, they can provide indications of practical importance (Gelman & Stern, 2006) and are discussed descriptively going forward. The direction of the relationships between Part 1 and Part 2 ratings, however, were all indicative of positive changes, with the exception of physical health. That is, self-rated improvement, clinician-rated improvement, and life satisfaction scores increased from Part 1 to Part 2, while ratings of anxiety, depression, and psychological distress decreased from Part 1 to Part 2. Ratings of physical distress, however, increase from Part 1 to Part 2. As well, the lack of significance in the results likely stems from the low sample size collected. Given the trends observed, it is possible that a larger sample would result in statistical significance, indicating either significant changes or significant equivalence. It is also possible that the factors explored are not directly associated with each other or that a third factor may be involved in the relationships. Of the seven *t*-tests conducted, six (85.7%) yielded non-significant differences that were in the expected direction.

Bivariate Correlations

The relationships between self- and clinician-rated improvement and support for the program at Part 1 and 2 were explored through bivariate correlations (see Table 3). These results were not statistically significant, however the direction of the relationship between self-rated improvement and support for the program at both Part 1 and 2 indicated that greater improvement is related to greater support for the program. In Part 2, greater clinician-rated improvement was related to greater support for the program.

Bivariate correlations were also performed to investigate the relationship between connection to culture and engagement, self-rated improvement, and support for the program at both Part 1 and 2 (see Table 4). The majority of these relationships were non-significant, with the exception of Part 2 comparing connection with culture and the counselling rapport and peer support subscales of engagement. Again, however, the relationships observed are in the expected direction indicating that a greater connection to culture at Part 1 was related to greater treatment satisfaction (subscale of engagement), and to greater support for the program. For Part 2, connection to culture was related to greater engagement in treatment (treatment participation, treatment satisfaction, counselling rapport, and peer support subscales) and greater support for the program.

Several relationships with connection to culture resulted in an opposite relationship than expected (i.e., Part 1 engagement subscales of treatment participation and counselling rapport, and self-rated improvement, and Part 2 self-rated improvement), however suspected reasons for this are provided in the discussion to follow. Of the 15 correlations evaluated, 11 (73.3%) yielded non-significant values in the expected direction.

Descriptive Information

At Part 1, 67% of clients in the methadone maintenance treatment program at CNTH (n = 32) reported a decrease in drug use and high-risk behaviours since admission to the program. Forty-eight percent of clients (n = 22) reported a decrease in criminal behaviour since admission and 39.1% (n = 18) reported no decrease in criminal behaviour, while 13% of clients (n = 6) chose not to answer this question; 10.9% of clients (n = 5) reported having new criminal convictions since admission to the program. Seventy-one percent (n = 33) reported that their housing condition improved since admission, and 71.7% (n = 33) reported having adequate

housing. Almost 20% of clients did not report an improvement in employment status (*n* = 9), and 41.3% of clients (*n* = 19) reported themselves as unemployed. Many clients reported an increase in family support since admission (*n* = 35; 86.1%), and 82.6% (*n* = 38) reported having family support. Many clients (*n* = 37; 80.4%) reported an average quality of life, 23.9% (*n* = 11) reported a poor quality of life, and 17.4% (*n* = 8) reported a very good quality of life. Clients' opinions of the services provided at CNTH at Part 1 were positive. These results can be seen in Tables 5 and 6.

At Part 2, 65.5% of clients in the methadone maintenance treatment program at CNTH (*n* = 19) reported a decrease in drug use and high-risk behaviours since admission to the program. This a lower proportion than in Part 1, however fewer clients completed the questionnaire at Part 2. Forty-eight percent of clients (*n* = 14) reported a decrease in criminal behaviour since admission and 27.6% (*n* = 8) reported no decrease in criminal behaviour, while 24.1% of clients (*n* = 7) chose not to answer this question; 6.9% of clients (*n* = 2) reported having new criminal convictions since admission to the program. These results are improvements compared to Part 1. Eighty-two percent (*n* = 24) reported that their housing condition improved since admission, and 82.8% (*n* = 24) reported having adequate housing, which are improvements compared to Part 1. Many clients reported an improvement in employment status (*n* = 15; 51.7%), and 31% of clients (*n* = 9) reported themselves as unemployed. The rate of unemployment decreased from Part 1. Seventy-two percent of clients reported an increase in family support since admission (*n* = 21), which was a decrease from Part 1, however 89.7% (*n* = 26) reported having family support, which was an increase from Part 1. Many clients (*n* = 16; 55.2%) reported an average quality of life, 27.6% (*n* = 8) reported a very good quality of life, and 20.7% (*n* = 6) reported a poor quality of life. These rates were slight improvements compared to Part 1.

Qualitative Client Data

Eight qualitative questions were asked on both Part 1 and Part 2 questionnaires and were manually coded and then examined for common themes.

Question 1: From your experience with methadone, what would help you the most now? For Part 1, this question was answered by 84.8% (*n* = 39) of clients. Five common themes emerged from this question including programming changes, maintaining the program as it is, the desire to remain abstinent from substances, the desire to get off methadone, and the desire for more social support. The first theme, programming changes, was the most highly recognized with 64.1% (*n* = 25) commenting in this area. This theme included things like being permitted to have carries, to be switched from methadone to Suboxone, to have a longer range of time to receive medication, and to have transportation provided. Others also made comments about how it would be convenient if they could fill prescriptions for other medications at the treatment centre (e.g., for anxiety, diabetes, etc.), and others noted that they would appreciate assistance in finding a job. For example, one client wrote, "Ive been on methadone on and off for ten years. I would like to see weekend carries and holiday carries. It would help me out a lot," while another wrote, "Give it out earlier."

The next most dominant theme, maintaining the program as it is, was recognized by 38.5% (*n* = 15). Under this theme many individuals used this portion of the questionnaire to note how helpful they find the program and how it is important to stay strong and stick to the program. For example, one client wrote, "Everything is fine the way it is," while another wrote, "Just taking care of myself and continuing the program." The desire to remain abstinent from substances was another dominant theme with individuals reporting that staying away from drugs and from those that use drugs is crucial to their continued success in the program. For example,

one client wrote, “Try to do my best to stay clean,” while another wrote, “By staying away from drugs.” This theme was recognized by 12.8% (*n* = 5).

Clients endorsed the desire to get off methadone as another theme with a reported understanding that this is a process that requires a great deal of effort. For example, one client wrote, “To start working on getting off the methadone,” while another wrote “It would be to work at getting off the methadone.” This theme was recognized by 12.8% (*n* = 5). Under the theme of the desire for more social support, both support from peers in treatment and encouragement from family members, were mentioned. For example, one client wrote, “To have a lot of encouragement from family and spouse.” This theme was recognized by 7.7% (*n* = 3).

For Part 2, this question was answered by 89.7% (*n* =26) of clients. The same five common themes emerged from this question, in a slightly different order. The first theme, maintaining the program as it is, was the most highly recognized with 34.6% (*n* = 9) commenting in this area. This theme again, gave individuals the opportunity to express that the program has helped them and others also commented on how the program has helped them to be positive role models and to live life in a more stress-free way. For example, one client wrote, “Nothing doing good.”

The next most dominant theme, programming changes, was recognized by 26.9% (*n* = 7). Under this theme individuals mentioned similar things as they had in Part 1 (e.g., desiring carries, a longer period of time to receive their methadone, and transportation), but individuals also noted that they desire counselling services. For example, one client wrote, “To get carries.” Within the last three themes, the desire to get off methadone (23.1%; *n* = 6; “Being weaned off slowly and carefully”), the desire to remain abstinent from substances (11.5%; *n* = 3; “Stay

strong and stay away from drugs"), and the desire for more social support (7.7%; *n* = 2; "I think getting my loved ones back"), comments were similar to Part 1 responses.

Question 2: To date, what has been your experience with the quality of care you have received from CNTH? For Part 1, this question was answered by 84.8% (*n* = 39) of clients. Four common themes emerged from this question including the helpfulness of the program, the excellent staff, lifestyle changes, and noted minor concerns with the program. The first theme, the helpfulness of the program, was the most highly recognized with 82.1% (*n* = 32) commenting in this area. This theme included comments that the program is "good," "very good," or "excellent," as well as comments that the program has changed their life, that the program helped them to stop using substances and to stay off of substances, and that they like the way that things are going currently. Others also made comments about the usefulness of the Matrix program, that they did not like hitchhiking previously, that they are happy, proud, and satisfied, and that they are thankful for the program. For example, one client wrote, "It has been really good," while another wrote "CNTH has showed consideration, help, support, and showed me that they care."

The next most dominant theme, the excellent staff, was recognized by 28.2% (*n* = 11). Under this theme individuals mentioned things like the feeling of respect they get from the staff, as well as patience and understanding. Individuals also noted that the doctors and nurses are "great" and "nice," that they have been treated well at the treatment centre, and that they appreciate being able to see that someone cares about them. For example, one client wrote, "Ive always been treated with respect," while another wrote, "I like the staff."

Lifestyle change was another dominant theme with individuals reporting things like having almost lost their family due to their substance use, being able to focus on healing, being

able to maintain employment, and having a more positive outlook on life. For example, one client wrote, “The center has help me to live a healthy life,” while another wrote, “I look at life in a positive way.” This theme was recognized by 15.4% (*n* = 6). Under the theme of minor concerns with the program, one individual noted that they find it difficult to come to the treatment centre every day and another individual noted that they “feel like a child” at times. For example, one client wrote, “I have a hard time coming in everyday.” This theme was recognized by 5.1% (*n* = 2).

For Part 2, this question was answered by 82.8% (*n* = 24) of clients. The same four common themes emerged from this question in a slightly different order including the helpfulness of the program, lifestyle change, the excellent staff, and minor concerns with the program. The first theme, the helpfulness of the program was again the most highly recognized with 70.8% (*n* = 17) commenting in this area. The comments in this theme were similar to the responses in Part 1, with the addition of one individual who noted that they appreciated meeting new people at the treatment centre. For example, one client wrote, “It has been really good for me no complaints or any kind of trouble for me,” while another wrote, “The Matrix was a good experience.”

The next most dominant theme, lifestyle change, was recognized by 25% (*n* = 6). Under this theme individuals mentioned things like noticing that life is “better” than before using substances, that they are no longer using substances, that they are happy that they no longer have to hitchhike to Prince Albert for medication, and that they feel stronger and more honest now. For example, one client wrote, “If it wasn’t for CNTH I would probably be still hitch-hiking everyday to P.A. for my methadone,” while another client wrote “My life has completely changed for the better life has become amazing and beautiful WHO KNEW!! LOL.”

The excellent staff was another dominant theme with many individuals reporting that the staff at CNTH are friendly, caring, and kind, and that they find it useful to know that they can go to staff for help. For example, one client wrote, “CNTH has great staff that are caring and good to talk to when needed,” while another wrote, “Staff are very kind.” This theme was recognized by 20.8% (*n* = 5). One individual also endorsed the theme of minor concerns with the program (3.9%), noting that they find it difficult to get to the treatment centre sometimes (“The only thing is I live 14 kms away and find it hard to get there sometimes”).

Question 3: What do you think new methadone clients need to know about making the transition? For Part 1, this question was answered by 78.3% (*n* = 36) of clients. Four common themes emerged from this question including shared cautions, the required commitment, that the program helps, and specifics regarding dosage. The first theme, shared cautions, was the most highly recognized with 38.9% (*n* = 14) commenting in this area. This theme included things like a recommendation for others to educate themselves prior to starting the program, to be prepared to be “stuck” on the reserve due to carries not being permitted, and a comment that you may have to stop taking other prescriptions while on methadone. Others also made comments about the side effects of methadone such as how it deteriorates your bones, and about the fact that the program has many rules and guidelines that have to be strictly followed. For example, one client wrote, “That methadone is not a drug to play with and its not easy to come off the meth when its time to a guess to try make it easier coming off,” while another client wrote, “Look into it before starting.”

The next most dominant theme, the required commitment, was recognized by 36.1% (*n* = 13). Under this theme individuals mentioned things like a required readiness to quit using all other substances and to stay on methadone for quite some time. Individuals also noted things like

necessary patience and willingness, as well as the importance to listen to guidelines. For example, one client wrote, “From my experience, people who come on the program should only do so when they are ready to quit all drugs and alcohol,” while another wrote, “That it’s a good program if you take it seriously.”

The helpfulness of the program was another dominant theme with individuals commenting that the program “works,” that it saves lives, and that they are grateful for their experience. Others also noted that the program brought “normalcy” back to their lives, and they encouraged others to get on the program. For example, one client wrote, “Methadone saved my life,” while another wrote, “That it helps you and is better than using opiates.” This theme was recognized by 36.1% (n = 13). Finally, clients endorsed the theme of specifics related to dosage with comments surrounding beginning on a lower dose, taking time to increase a dose, and to not stay on methadone longer than necessary. For example, one client wrote, “Well I think they just need to go high enough to where their leveled of and not nodding out otherwise you cant function right,” while another wrote, “Not to be on such a high dose.” This theme was recognized by 13.9% (n = 5).

For Part 2, this question was answered by 93.1% (n = 27) of clients. The same four common themes emerged from Part 2 of this question with slightly different rates of occurrences including the required commitment, that the program helps, shared cautions, and specifics regarding dosage. The first theme, the required commitment was the most highly recognized with 40.7% (n = 11) commenting in this area. This theme included similar comments from Part 1, with additional comments regarding a necessary desire to quit using other substances and a recommendation to “respect the process.” Encouragement was also provided by current clients with reports that the program “can work” and that “it’s possible.” For example, one client wrote

"How easy it is for them once they have to respect it because of the trouble a lot of us went through," while another client wrote, "It takes time, not easy but can be done."

The next most dominant theme, the helpfulness of the program, was recognized by 14.8% ($n = 4$). Under this theme individuals mentioned that the program provides a healthier lifestyle and a better life. For example, one client wrote, "That methadone really helps a person out to stay off drugs." Shared cautions was another dominant theme, however on this part individuals noted the effects of methadone on the body, the challenges related to transportation, and the possible withdrawals that can occur while dosing is adjusted or when tapering off of methadone. For example, one client wrote, "What it will do to your body." This theme was recognized by 11.1% ($n = 3$). Finally, one client (3.7%) endorsed specifics surrounding dosage, noting that individuals should be careful when dosages are being increased (i.e., "Just be careful about how much you move up (dose)").

Question 4: What do you think would lead you back to drug use? For Part 1, this question was answered by 81.6% ($n = 40$) of clients. Five common themes emerged from this question including life problems, returning to old lifestyle, nothing, using substances, or losing the treatment program. The first theme, life problems, was the most highly recognized with 35% ($n = 14$) commenting in this area. This theme included things like having something terrible happen, a lack of social support, problems with a partner, a lack of work, inconsistency in life, boredom, or experiencing pain. For example, one client wrote, "Through losing a loved one. Being cheated on by a close partner. Finding out I had contracted a fatal disease," while another wrote, "By not being consistent in my healing."

The next most dominant theme, returning to their old lifestyle, was recognized by 27.5% ($n = 11$). Under this theme individuals mentioned things like spending time with people who use

substances, peer pressure, going back to street life, and returning to a community where they used to live. For example, one client wrote, “Hanging around with people that do drugs,” while another wrote, “Likely peer pressure. So I try to stay away from people.” Nothing was another dominant theme with many individuals reporting that nothing, aside from death, could lead them back to drug use. For example, one client wrote, “Nothing. Determined to stay on the right path in life,” while another client wrote, “I doubt that will ever happen. I learned from my first time and I regret it.” This theme was recognized by 25% (n = 10).

Many clients endorsed the theme of using substances with individuals noting drugs specifically, or the withdrawals they had experienced from substances as potential issues that could lead them back to substance use. One individual also noted that staying clean is a daily battle. For example, one client wrote, “Probably getting off the methadone like quickly and getting dope sick all over again,” while another wrote, “Loseing myself to the darkness of drugs.” This theme was recognized by 20% (n = 8). Finally, under the theme of losing the program, individuals noted that being off of methadone would lead them back to drug use and that they would have nowhere else to go if they lost the program. For example, one client wrote, “If I were kicked off the methadone treatment and would have nowhere else to turn,” while another wrote, “Getting taking off the program.” This theme was recognized by 15% (n = 6).

For Part 2, this question was answered by 93.1% (n = 27) of clients. Three of the same common themes emerged from this question including life problems, nothing, and losing the program. The first theme, life problems, was the most highly recognized with 63% (n = 17) commenting in this area. This theme included similar responses to Part 1, but additional responses included things like becoming depressed and having low self-esteem. For example,

one client wrote, “If I was experiencing something bad in my life,” while another wrote, “Low self-esteem.”

The next most dominant theme, nothing, was recognized by 29.6% (*n* = 8). Under this theme similar responses emerged to Part 1, with one individual also stating that their frame of mind has changed so relapse is no longer an option. For example, one client wrote, “My frame of mind has changed and relapse is no longer an option,” while another wrote, “Almost absolutely nothing.” Losing the program was the third dominant theme with the same responses emerging as during Part 1. For example, one client wrote, “If I was to ever get kicked off,” while another wrote, “Getting kicked off methadone.” This theme was recognized by 22.2% (*n* = 6).

Question 5: What has CNTH done to assist you to improve your life? For Part 1, this question was answered by 80.4% (*n* = 37) of clients. Eight common themes emerged from this question including the existence of the program, encouragement, providing tools and education, being treated with respect, changing mindsets, nothing, helping to stay clean, and making life more manageable. The first theme, the existence of the program, was the most highly recognized with 46% (*n* = 17) commenting in this area. This theme included things like being prescribed methadone, that the program has saved lives, and that the program is helpful. Others also made comments about being able to see others get well on the program, as well as general comments that the program has done a great deal for them. For example, one client wrote, “They actually saved my life by putting me on the program otherwise I probably be six feet deep by now,” while another client wrote, “Well they let me get on the methadone.”

The next most dominant theme, encouragement, was recognized by 24.3% (*n* = 9). Under this theme individuals mentioned things like being given second chances, the staff encouraging clean urine screens and not giving up on them, as well as the staff “putting up” with them.

Individuals also reported that they did not want to let the staff down. For example, one client wrote, “They never gave up on me there still here wanting to help,” while another wrote, “By giving me this second chance doing treatment cause I need to try get kids back, plus there keeping my mind busy.” Under the theme of providing tools and education, things like the helpfulness of the Matrix program, being educated about addiction and relapse, assistance finding work, and general guidance were mentioned. For example, one client wrote, “I took the Matrix program which help me in after care as well,” while another wrote, “Educated me in my addiction.” This theme was recognized by 21.6% (n = 8).

Being treated with respect was another dominant theme with many individuals reporting that the staff does not look down on them and that the staff is caring and respectful. For example, one client wrote, “The people here gave me respect, which meant more to me than anything,” while another wrote, “Letting me know Im still an equal and Im not looked down at for who I was.” This theme was recognized by 13.5% (n = 5). Clients endorsed the theme of changes in mindset with ideas surrounding having their eyes opened, learning how to be a better person and how to be happy, as well as becoming closer to their creator. For example, one client wrote, “Brought me back to reality,” while another wrote, “They showed me there so much more to live for and helped me remember whats important in my life and how to be a better person for me and my babie.” This theme was recognized by 13.5% (n = 5).

Under the theme of nothing, 13.5% (n = 5) of individuals reported that the program has not yet done anything to assist them, noting that they had only recently begun the program. For example, two clients wrote, “Nothing,” while another wrote, “Nothing so far.” Helping to stay clean was recognized by 10.8% (n = 4) with individuals noting that they are staying clean and are staying away from both alcohol and drugs. For example, one client wrote, “Helping me stay

away from drugs." Finally, making life more manageable also emerged as a common theme, with individuals reporting that their daily routine is more manageable and their family is happy about this. For example, one client wrote, "Made my life more manageable." This theme was recognized by 8.1% (n = 3).

For Part 2, this question was answered by 93.1% (n = 27) of clients. Six of the same common themes emerged from this question, although in a slightly different order, including the existence of the program, helping to stay clean, providing tools and education, making life more manageable, encouragement, and being treated with respect. The first theme, the existence of the program, was the most highly recognized with 44.4% (n = 12) commenting in this area. This theme included similar comments as Part 1, with additional comments about the location making the program easier to access. For example, one client wrote, "Just being there," while another wrote, "Knowin they will be there to help me when I need it."

The next most dominant theme, helping to stay clean, was recognized by 29.6% (n = 8). Under this theme individuals mentioned additional things like having control over their addictions and that sobriety can be great. For example, one client wrote, "Not to go back on the drugs I was using before I came to CNTH," while another wrote, "They helped me stop using." Providing tools and education was another dominant theme with individuals reporting similar things as in Part 1, with the addition of note that the counselling and doctor's visits are useful. For example, one client wrote, "With the matrix program it helped in countless areas in my life daily living," while another client wrote, "Counselling doctors visits." This theme was recognized by 25.9% (n = 7).

Clients endorsed the theme of making life more manageable with a couple of new ideas emerging surrounding being out of prison and being a productive member of society. For

example, one client wrote, "This place gave me the opportunity to prove that I can be a productive member of society," while another wrote, "Gave me a new beginning." This theme was recognized by 18.5% (n = 5). Under the theme of encouragement, things like encouragement to be honest and to stay strong were mentioned, as well as an indication of the strictness of the program. For example, one client wrote, "Being strict." This theme was recognized by 11.1% (n = 3).

Question 6: What could CNTH do better? For Part 1, this question was answered by 76.1% (n = 35) of clients. Four common themes emerged from this question including nothing, recommendations for change, greater flexibility, and more programming. The first theme, nothing, was the most highly recognized with 42.9% (n = 15) commenting in this area. This theme included things like note that the program is doing everything they can and that they are doing well. Others also specifically noted that there is nothing they believe CNTH can improve on at this time. For example, six clients wrote, "Nothing," while another client wrote, "I feel they did all that I need to be done."

The next most dominant theme, recommendations for change, was recognized by 25.7% (n = 9). Under this theme individuals mentioned things like allowing carries, having longer hours to receive their methadone, and having a shorter waitlist to enter the program. For example, one client wrote, "Give carries to people that are serious," while another wrote, "Longer hours. 2 hours is a short of a time to get it."

Greater flexibility was another dominant theme with many individuals reporting things like how the treatment centre should not give up on people when they relapse, that they should be more open about who is accepted into the program, and that they should not control people. Individuals also reported that they did not appreciate being "forced" to take the Matrix program.

For example, one client wrote, “Not force some one to take Matrix if they don’t want too,” while another client wrote, “Stay out of personal lives.” This theme was recognized by 22.9% (*n* = 8). Clients endorsed the theme of more programming with individuals reporting that they would appreciate being able to have other prescriptions filled at the treatment centre. Individuals also reported things like an interest in having the Elder come in every Sunday and that they would appreciate more opportunity for one-on-one counselling. For example, one client wrote, “Have the elder come every Sunday to host the sweats, no matter what,” while another wrote, “I would rather take one on one conceling then do a group program.” This theme was recognized by 14.3% (*n* = 5).

For Part 2, this question was answered by 93.1% (*n* = 27) of clients. The same four common themes emerged from this question in a slightly different order including nothing, recommendations for change, more programming, and greater flexibility. The first theme, nothing, was the most highly recognized with 48.2% (*n* = 13) commenting in this area with similar responses to Part 1. For example, one client wrote, “They have done enough for me,” while another wrote, “They do more then enough. I wouldn’t change a thing.”

The next most dominant theme, recommendations for change, was recognized by 44.4% (*n* = 12). Under this theme individuals mentioned additional recommendations to Part 1 including a recommendation for peer support and more assistance with transportation. For example, one client wrote, “In the winter as cold weather give carries to disabled clients,” while another wrote, “To pick up the clients and take them for methadone.”

More programming was another dominant theme with individuals suggesting that having lunch provided would be useful, as well as having more counsellors and a 2-week follow up period after commencing treatment. For example, one client wrote, “More assistance and

programs to get involved," while another wrote, "More counsellors." This theme was recognized by 14.8% (*n* = 4). Finally, clients endorsed the theme of greater flexibility with comments regarding the strictness of the program. For example, one client wrote, "Don't get so nosey about my personal life." This theme was recognized by 11.1% (*n* = 3).

Question 7: The thing I have liked most about my experience of the methadone program is. For Part 1, this question was answered by 82.6% (*n* = 38) of clients. Four common themes emerged from this question including life change, being off drugs, the staff, and specific program components. The first theme, life change, was the most highly recognized with 65.8% (*n* = 25) commenting in this area. This theme included things like expression that the program works, that their lives have normalcy, and that they have a job and a better outlook on life now. Others also made comments about being off the street, having a new chance at life and feeling better about life, being confident, being able to save money, being out of jail, as well as having improved family relationships. For example, one client wrote, "Having a little normalcy in my life," while another client wrote, "Getting me feeling and happiness back and feel so mutch better about life."

The next most dominant theme, being off drugs, was recognized by 57.9% (*n* = 22). Under this theme individuals mentioned things like staying clean, not having to search for drugs, having control of their addictions, and being confident that they will not relapse, as well as not being sick from withdrawals. Individuals also noted that they are happy about no longer having to inject drugs and that they are no longer "harassed" for their medications in the community. For example, one client wrote, "I like the fact that I no longer use needles," while another wrote, "That I did not have to go out and look or steal for my drug habbit so in other words it helps me get through my day without worries about looking for drugs and other stuff to get high."

The staff was another dominant theme with many individuals reporting things like finding the nurses helpful, and note that the staff are respectful and caring. One individual also noted that they appreciated being placed on the program quickly when they were ready. For example, one client wrote, “The staff are most respectful and caring. Also understanding if anything has a problem,” while another wrote, “The staff are great! Keep it up!” This theme was recognized by 36.8% (*n* = 14). Finally, clients endorsed the theme of specific program components with comments surrounding the treatment centre being close to home, the helpfulness of the Matrix program, and the opportunity to meet others in treatment. For example, one client wrote, “The thing I like most of having methadone at my home place and on reserve is the convenience of having it in my back door.” This theme was recognized by 10.5% (*n* = 4). One individual also noted that they were not sure what they have liked most about their experience to date.

For Part 2, this question was answered by 93.1% (*n* = 27) of clients. The same four common themes emerged as from Part 1 in a slightly different order, including being off drugs, life change, the staff, and specific program components. The first theme, being off drugs, was the most highly recognized with 33.3% (*n* = 9) commenting in this area. This theme included similar comments as in Part 1. For example, one client wrote, “Getting of the drugs,” while another client wrote, “No more shoving needles in my body.”

The next most dominant theme, life change, was recognized by 29.6% (*n* = 8). Under this theme individuals mentioned similar comments as in Part 1, with the addition of individuals noting that they are caring for themselves now. For example, one client wrote, “Im living a lot better than was before,” while another wrote, “Changed my life for the better.” The staff was another dominant theme with individuals reporting things like being treated like a human being.

For example, one client wrote, “Staff is kind and respectful,” while another wrote, “The acceptance, respect and humility. They all treated me like I was and am a decent human being.” This theme was recognized by 18.5% ($n = 5$). Clients also endorsed the theme of specific program components with similar comments to Part 1, with the addition of note that the cookies that are provided are appreciated. For example, one client wrote, “Being there being on it,” while another wrote, “I enjoy the matrix program.” This theme was recognized by 18.5% ($n = 5$).

Question 8: The thing I have disliked most about my experience of the methadone program is. For Part 1, this question was answered by 81.6% ($n = 40$) of clients. Four common themes emerged from this question including specific program components, commitment, nothing, and abuse of the program. The first theme, specific program components, was the most highly recognized with 80% ($n = 32$) commenting in this area. This theme included things like the time restraints on when methadone is given out, transportation needs, not being permitted to have carries, and the side effects of methadone. Others also made comments about difficulty building trust at the treatment centre, and the stigma within the community. For example, one client wrote, “We need trust! For the weekend give us carries,” while another wrote, “I feel trapped. There is a limited time to get your methadone.”

The next most dominant theme, commitment, was recognized by 32.5% ($n = 13$). Under this theme individuals mentioned things like having to stay on methadone for so long, having to go to the treatment centre every day, and not being able to drink. For example, one client wrote, “Being on it so long. I want to get off now,” while others wrote, “The having to be here everyday to get my drink I feel stuck at times.” Nothing was another dominant theme with many individuals reporting that there was nothing they disliked about the program. For example, one client wrote, “I did not dislike everything,” while another wrote, “Cant say if any at all.” This

theme was recognized by 17.5% (*n* = 7). Clients endorsed the theme of abuse of the program with individuals reporting things like taking advantage of the program either personally, or watching others do so, as well as experiencing relapses. For example, one client wrote, “I abused it just to get high.” This theme was recognized by 10% (*n* = 4).

For Part 2, this question was answered by 96.6% (*n* = 28) of clients. The same four common themes emerged from this question in a slightly different order including nothing, specific program components, commitment, and abuse of the program. The first theme, nothing, was the most highly recognized with 35.7% (*n* = 10) commenting in this area. This theme again involved individuals noting that there was nothing they have disliked about their experience to date. For example, one client wrote, “Nothing disliked,” while another wrote, “I do not dislike anything I would not change anything.”

The next most dominant theme, specific program components, was recognized by 28.6% (*n* = 8). Under this theme individuals mentioned things similar to Part 1, with the addition of individuals noting that they have been unable to find a job and that the program has not provided assistance with getting their children back. For example, one client wrote, “The little time we get to get our methadone in mornings,” while another wrote, “They don’t give carries.” Commitment was another dominant theme with individuals reporting similar comments as in Part 1. For example, one client wrote, “Being stuck and not having the freedom to get up and go wherever I wanted,” while another wrote, “Being tied down to the program.” This theme was recognized by 21.5% (*n* = 6). Finally, clients endorsed the theme of abuse of the program with comments again around either abusing the program themselves or seeing others abuse the program. For example, one client wrote, “How much some of the clients using bad drugs and other things and take advantage of the program.” This theme was recognized by 7.1% (*n* = 2).

Qualitative Staff Data

Eight qualitative questions were asked to 11 staff members during interviews. These interviews were recorded, then manually transcribed, coded, and examined for common themes.

Question 1: What do you feel is the main purpose of the methadone maintenance therapy program at CNTH? Three common themes emerged from this question including to help individuals get off all drugs, to save lives, and to provide awareness to the community. The first theme, the help individuals get off all drugs, was the most highly recognized with 100% (n = 11) commenting in this area. This theme included things like helping individuals get off and stay off drugs, to help them overcome their addictions, and to recover. Comments were also made about the slow process of recovery, the importance of life balance, living a healthier life, providing help with withdrawals, and an indication that the help provided is a harm reduction strategy. For example, one individual stated:

> Well, I suppose it's to provide a bridge between people's addiction issues and being able to move forward in their life. To start to replace the street drugs that they've been using and building a bridge towards, slowing down, harm reduction, those sort of things. And maybe total abstinence in a few cases.

Another individual stated, "The way I understand it, the program was implemented to assist and aid, probably addicted people to get off what they're on… if the program is done properly on their part."

The next most dominant theme, to save lives, was recognized by 72.7% (n = 8). Under this theme individuals mentioned things like stopping hitchhiking, an improved quality of life, recovery, and safety. For example, one individual stated:

> The main goal at the time was that they used to hitchhike to PA just to get their methadone program so it was a wise idea at the time to just to have it here instead of them hitchhiking. For the safety of the clients I think that's why it was suggested to be here on the res instead of them hitchhiking back and forth every day.

Another individual stated "To save lives." Community awareness was the third dominant theme with individuals reporting things like the importance of helping the community to understand addiction challenges as well as helping the community to become a safer place. For example, one individual stated:

> By having a clinic here on the reserve, it's bringing awareness. It's educating, not only the people within the treatment centre, but it's also educating the community through different programs, through counselling, there's intervention, treatment.

This theme was recognized by 18.2% (*n* = 2).

Question 2: What are the main strengths of the methadone maintenance therapy program at CNTH? Six common themes emerged from this question including the integrated nature of the program, the friendly atmosphere, client improvement, accountability, accreditation, and the community. The first theme, the integrated nature of the program, was the most highly recognized with 100% (*n* = 11) commenting in this area. This theme included comments regarding the various services offered at CNTH including access to counselling, a physician, education that is provided, the Matrix program, and the offer of both methadone and Suboxone. Others also made comments about how the program is not a "drive thru" program, comparing CNTH's services to pharmacies that dispense methadone, and that CNTH as a whole, offers both inpatient and outpatient services. For example, one individual stated:

> They have the support if they need counselling or if they need treatment, it's available, they can be sent from here. There's also a worker that can work with them, that are here. And the doctor comes here also. So those are some of the things that they have access to.

Another individual stated:

> I think that it happens in an integrated way; it's part of a larger program. There's inpatient, there's matrix, there's other things that clients can get into that they can readily access. Nurses, counsellors, … so I think there's a little bit more program built up around it, than kind of a standalone, get it from your pharmacy kind of programs that exist in other places.

The next most dominant theme, the friendly atmosphere, was recognized by 63.6% (*n* = 7). Under this theme individuals mentioned things like the safe environment at the treatment centre and the respect and support that staff provide. For example, one individual stated, "Everybody's always really comfortable and they always leave out laughing. It's just a good environment for them. They feel really safe, and yeah, the nurse is just awesome," while another individual stated, "I think just the friendly atmosphere."

Client improvement was another dominant theme with individuals reporting things like clients' lives are saved, they are staying off drugs, they recognize the importance of family, and they are employed. For example, one individual stated:

> What you'll actually see too is a lot of parents looking at family and the importance of family and they're not out there spending all their money on drugs or taking what they should be doing for the family. So there's actually a lot of benefits to it.

Another individual stated:

> Like they used to go to… they would hitchhike to PA before we got the methadone program during the summer and the winter and it would take up their whole day. In the morning they would be hitchhiking and they go to PA, get their drink, and they'd spend the rest of their time trying to hitchhike back. And quite often you know, most of them wouldn't be able to get rides, so they're walking, so it became a concern to us, especially in the winter time… they'd be walking and it's cold out there.

This theme was recognized by 54.5% (*n* = 6). Staff members also endorsed the theme of accountability with comments about how clients get what they put into the program, that treatment is self-directed, and that they have to commit and visit the treatment centre daily. For example, one individual stated:

> Yeah, they can pick their own, this thing they want to work on, whatever…. sexual abuse or domestic violence, whatever, right. Like you choose it, self-directed treatment. I don't know if they still call it that, but yeah, I think we, as an organization, working here, I mean, we have a lot more treatment options, more resources than a lot of other places, I think. I feel, maybe I'm just being biased.

This theme was recognized by 36.4% (*n* = 4).

Under the theme of accreditation, staff members noted that the program has firm guidelines, policies, and procedures, and that the program operates in partnership between government and community members. For example, one individual stated, "CNTH is fully accredited by accreditation Canada," while another individual stated, "I think it's just policies and procedures in place, guidelines provided by the board of directors, partnership, agreed and signed agreement for the CNTH program." This theme was recognized by 36.4% (*n* = 4). The

community also emerged as a common theme, with individuals reporting that the program's location in the community is important, as well as the crime reduction that has been observed in the community. For example, one individual stated, "Well I know that not much communities have a methadone, like what we do here, so I think that's our strength here. It's good that we have this at the treatment centre here." This theme was recognized by 18.2% (*n* = 2).

Question 3: What are the main challenges/barriers of the methadone maintenance therapy program at CNTH? Five common themes emerged from this question including funding, client factors, community factors, the long-term nature of methadone, and no problems. The first theme, funding, was the most highly recognized with 81.8% (*n* = 9) commenting in this area. This theme included things like a desire to have a detox centre built, to have a separate facility for the methadone program, and to have more staff, more vehicles, and more programming. Others also made comments about how busy the program is and that they wish the program could open earlier. For example, one individual stated:

> It's busy… I think they talked about having a standalone place that this could happen, there's the interface between the inpatients and the methadone people and you've probably seen the little barrier that they put up.

Another individual stated, "Every program screams for more funding. But I think it's busy and more of those needs could be met."

The next most dominant theme, client factors, was recognized by 27.3% (*n* = 3). Under this theme individuals mentioned that there are occasionally challenging incidents with aggressive or angry clients, that there are challenges associated with elderly clients, and that some clients have difficulty traveling to the treatment centre. For example, one individual stated:

> Well you're going to have your hiccups along the way. I think you guys even seen an incident the other day. Like stuff like that. It's going to happen you know. But, it comes with the territory and we're prepared for it. You can't always be prepared for everything, especially for something like that. I wasn't here, I left, I did some errands. And they said you picked a fine time to leave, they were asking me. But yeah, with our security guard, he really handles. Because he used to be a peace officer… so he knows the routine, so he knows what they're going through.

Community factors was another dominant theme with individuals reporting things like a lack of available employment within the community and a lack of spirituality stemming from colonialism. For example, one individual stated:

> Probably another barrier and challenge would be spirituality because of residential schools. A lot of people carry a lot of that with them, so that happened in like the past, that's not them, hey? But they're here today and that's a barrier and a challenge for them because a lot of sexual abuse, a lot of mental, physical, spiritual authority over being misused, abused, like by a priest or a pastor. And it's not only with First Nations people, and it's in other areas, you know? Like there's people with special needs, that's a barrier, that's a challenge, right? Because you need to deal with them and their issues, which might be a different form of grief too. It doesn't have to just be losing somebody, dying, because people can grieve different ways. It can actually bring them to depend on these opiates rather than the spiritual side of them to believe that there is a Creator that actually cares about them because they're so broken. So when they have that spirituality it's brought to them slowly, but surely, whoever it may be. It encourages them to know that

> there's someone out there that actually cares about them more… that they can actually care about themselves.

This theme was recognized by 18.2% (*n* = 2). Staff also endorsed the theme of the long-term nature of methadone, noting that clients often have to remain on methadone indefinitely. For example, one individual stated:

> It takes away that freedom of choice of wanting to get off it. Because I believe that if a client wants to get off the stuff, they should, right? They have that choice. That's the only thing I think that hinders from them.

This theme was recognized by 18.2% (*n* = 2). Finally, 18.2% (*n* = 2) reported that there are no challenges faced at CNTH. For example, one individual stated, "Right now I think the program is running good. I don't see any problems over all."

Question 4: Do the services provided (e.g., cultural services, matrix program) work well with the methadone maintenance therapy program to meet the needs of the clients at CNTH? Two common themes emerged from this question including that the clients can request cultural services, and that the services complement each other well. The first theme, that clients can request cultural services was the most highly recognized with 72.7% (*n* = 8) commenting in this area. Staff noted that clients can take part in cultural services that are offered (e.g., sweats, meeting with an Elder) if they would like to, and they also noted that clients can request non-traditional spiritual services if they identify with another denomination. For example, one individual stated:

> Cultural, yeah. There's two. They're allowed to choose whatever they like. Some like traditional, you know go to sweats and we have, go to church. And we got two or three different churches they can go to on reserve. One's just right there. They have a choice

> what works for them spiritually. They have good options to pick from. So I think we're pretty good there too as a community because you gotta have community resources too right? And then what do they say, it takes a community to heal a child, or whatever, I hear that quite often. Our community is hurting. There is a lot of addiction.

Another individual stated:

> Cultural? They have sweats here, and the lodge here and there, they have a place to smudge in the back over there… they're always asking for matches or sweet grass to smudge with and they're always wondering when the next sweat is going to be. It's all good.

The second dominant theme, that the services complement each other well, was recognized by 45.5% (*n* = 5). Under this theme individuals essentially reported that, yes, the cultural services and Matrix program work well with the methadone services at CNTH. For example, one individual stated, "Yes they do, I think they do," while another individual stated, "Well the clients we've had in here, I can't speak to the whole population of methadone clients, but the ones we've had in here, yeah."

Question 5: What are your indicators of improvement in clients? In the community? Regarding indicators of improvement in clients, two common themes emerged from this question including changes in thinking and changes in lifestyle. The first theme, changes in thinking, was recognized by 100% (*n* = 11) of staff members interviewed. This theme included things like noticeable differences in clients' self-image, level of stress and happiness, sobriety, and willingness to open up about their difficulties. Others also made comments about how clients develop a positive attitude and they become more responsible. For example, one individual stated:

> They're happy! They're… it's just such a difference in their whole mentality. Like they're coming in and they're laughing and they're joking and they're, you know, they're trying to… you can see that they're trying to better themselves. And, I don't know, it's so nice to see. You know, compared to being angry and wanting to know where they're going to get their next dollar to get their fix or whatever. Like, it's great.

Another individual stated, "Well they come in here more happy, some of them. And I find they're doing good. They have their ups and downs, but they're doing a lot better than what they were, when they were on their drug."

The second dominant theme, changes in lifestyle, was again recognized by 100% (n = 11). Under this theme individuals mentioned noticing that clients are more energetic, independent, sociable, and stable. Staff also noted that clients begin to look healthier, they stop buying drugs, they stop putting their children in harm's way, and they are employed. Additionally, staff noted that clients have their ups and downs, but in general, their lifestyle changes continue to grow. For example, one individual stated:

> There are a few who have done well and you can see it, and like there's a few who are in the program and come to work here, which is really good. Like it's awesome to see that happening and these people want to get off methadone program completely… like it's totally changed their lives. It's good to see.

Another individual stated:

> Well, some of the things that I guess overall, the, in a lot of them there's more stability, it's less chaotic, the great big waves that came crashing into their lives and knocked them sideways subsides somewhat and so they're more able to handle the day to day stresses.

Regarding indicators of improvement in the community nine staff members had responses, and two common themes emerged including that the community has a grasp on the addiction problem, and that stigma is decreasing. The first theme, that the community has a grasp on the addiction problem, was recognized by 66.7% ($n = 6$) of staff members interviewed. This theme included things like reductions in crime, less phone calls about clients from community members, not seeing people hitchhiking, and seeing workshops and programs being offered in the community. For example, one individual stated, "And there's less crime. Like the RCMP member was there and he said that the crime rate had gone down considerably. There's no break ins and stuff. Not like before. And they work with us." Another individual stated, "And I've been back for maybe, 5 years living in the community and getting a grasp of what's going on as compared to what it was like when I left and what it's like now."

The second dominant theme, that stigma is decreasing, was again recognized by 33.3% ($n = 3$). Under this theme individuals mentioned that there was initial stigma towards clients receiving methadone within the community, but that there have been noticeable changes in this over time. For example, one individual stated:

> Well in the beginning it was, they didn't like the idea. They thought it was, I guess pushing another drug, except it's acceptable. They didn't like the idea at first. Once they got a few people that are clean from changing their lives from living differently and also the safety of the, ones that used to hitchhike, they also mentioned that it was good to have it here instead of hitchhiking in the cold, every day. At least now that, it's something that they can have access to.

Question 6: What would Ahtahkakoop Cree Nation (and Pelican Lake, Witchekan Lake, and Big River) be like if the methadone maintenance program at CNTH had not been implemented? Two common themes emerged from this question including that people would continue to suffer from addiction and that there would be differences in the community. The first theme, that people would continue to suffer from addiction, was the most highly recognized with 100% (*n* = 11) commenting in this area. Staff noted that there would be a lot of lives lost, people would still be hitchhiking to Prince Albert, they would still be using drugs, and overall, people would still be struggling. Others also made comments about how family and unemployment problems would continue to grow, and they noted that more and more people would be becoming addicted due to the continued ease of access to substances within the community. For example, one individual stated, “The majority of them I think would die,” while another individual stated, “I think there would be a lot of lost people. Lost people, they would be laying out there some place… they would be in the graveyard right there.”

The second dominant theme, differences within the community, was recognized by 54.6% (*n* = 6). Under this theme individuals mentioned that the crime rate would continue to be high, that there would still be many drug dealers around, that the community would be uneducated about addiction, and that drug users would return to hanging around public locations within the community. For example, one individual stated:

> More domestic violence, stuff in the homes, breakups I think. If it’s done properly with them, following through, I think there would be a lot more. I’m sure you’d see a lot more. I’m sure there’s still a lot of it going on, with the drugs, but I think, which would be a by-product of doing the program right.

Another individual stated:

> Yeah, there would be a big difference in the community. You know, they'd probably be hanging around the stores, the public places, and yeah. It's been really good since we've had this methadone. It started off kind of on a, you know, with experiences you live and learn, you know? You get ups and downs with the methadone program, you get, now it's running real smooth. The clients are aware of the rules and the policies that go along with coming into treatment here. They're, yeah, they seem to, to me they're, all of them, the majority of them are really good.

Question 7: What are your top three practical suggestions to improve the methadone maintenance program at CNTH? Three common themes emerged from this question including additional programming, improving physical demands, and nothing. The first theme, additional programming, was the most highly recognized with 72.7% (*n* = 8) commenting in this area. This theme included the desire to have a detox program, as well as the addition of healthy eating programs, job placement programs, and being able to provide carries. Others also made comments about how having regularly scheduled urine screens would be useful, as well as screening for motivation before clients begin on the program and helping to transition people from methadone to Suboxone. For example, one individual stated:

> Job placements. I think it's the lack of jobs around here too that keeps people in their addiction, eh? There's nothing for them to really feel good about themselves. People feel good when they're accepted into an organization and they're doing their jobs and it does something to people.

Another individual stated:

> Like I said, the detox. That is a need. That's a real need. To have people, but what I'm doing too is working with the clinic and the band and child family services, so we get together and throw out ideas, like what can we do to improve their lives in some way. Might be a small thing, you know, but it helps.

The next most dominant theme, improving physical demands, was recognized by 72.7% (n = 8). Under this theme individuals mentioned things like a need for a separate location for the methadone program, having more inpatient service beds, having more vehicles, and having an electronic program for maintaining medical records. For example, one individual stated:

> Like I said, being here 20 some years, it would be nice to have their own building, separate them from. That way we would eliminate the security thing. We had reports of like, they would steal clients' shoes that were in the lobby. We'd lose little things like that. Like little stuff, little, I wouldn't say petty, but you know, stuff. And that's just because of the physical layout of the building. It would be so so nice if they had their own building, the detox. Because there is plans of that, it would be so nice if they got moving on it, because I think we're past the stage of trial. We know what we need. That's the biggest barrier I think. If they had their own building separate from these guys, I think things would run a lot smoother internally.

Another individual stated, "If it were to go down the road of more standalone place that serves the methadone people by and large." Finally, nothing was another dominant theme with individuals reporting that the program should continue to operate as is. For example, one individual stated, "Oh geez, I don't have any really suggestions about it. I think everything is going on great right now as it is." This theme was recognized by 27.3% (n = 3).

Question 8: What would be your main goal for the future of the methadone maintenance therapy program at CNTH? Two common themes emerged from this question including having all clients drug free and having a larger program. The first theme, having all clients drug free, was the most highly recognized with 45.5% (*n* = 5) commenting in this area. Under this theme, staff members reported that they would like to see clients being completely clean of all substances, including methadone, even though this would likely cause them to lose their jobs. For example, one individual stated, "Main goal? Hopefully the reserve will be drug and alcohol free, but that would be putting myself out of a job, but that's alright," while another individual stated, "For all of them to be off of it. All of them, every single one of them, off methadone."

The second dominant theme, having a larger program, was recognized by 36.4% (*n* = 4). Under this theme individuals mentioned that they would appreciate being able to offer more services and have their own location. For example, one individual stated:

> More services further down the line, so methadone and suboxone into tapering, into getting them more either into inpatient stuff or getting them some individualized counselling, wellness programs for them. Yeah, just helping them with those next steps as they're more able to take those.

Another individual stated, "I would like to see us getting larger, extending somehow." One individual (9.1%) also noted that they hope to see the program continue as is, and one individual (9.1%) reported that they would like to provide assistance to other communities in developing similar programming. This individual stated:

> I'd like to see more of this elsewhere in other communities as well, like to be inspired. Just to help other people because it used to be pretty, it seems as if this is kind of hard on

the people and now that they got this here it's a little more easy for them. So I'd like to see it in more communities.

Discussion

Discussion of Quantitative Results

The purpose of this study was to evaluate the methadone maintenance therapy program at CNTH. While most quantitative results were not statistically significant within the evaluation, likely related to the small available sample size, the directions of the observed associations were indicative of the hypothesized relationships. In regards to the exploration of improvement or stability between variables, results were neither significantly different nor statistically equivalent, which suggests that the study design likely did not have sufficient statistical power to show whether there was a meaningful effect in the hypothesized relationships (Lakens et al., 2018). Because there were a limited number of participants available to include in this evaluation and we intended to include the entire available population, a priori sample size calculations were not conducted. During equivalence testing, however, it was determined that a sample size of 84 pairs was required based on the used effect size, to have appropriate power (.8) to detect statistically significant equivalence (Lakens, 2017). With that being said, the observed results were nonetheless positive and trended as expected.

Between Part 1 and Part 2 increases were generally seen in ratings of both self and clinician-rated improvement and quality of life, and reductions were seen in symptoms of anxiety and depression, and physical and psychological health concerns. Although we do not know whether these results indicate meaningful change or stability, the finding that these ratings are not moving in a negative direction is clinically relevant. Both clients and clinicians at the treatment centre were, on average, noticing improvements over time. Regarding descriptive

information on quality of life, for both Parts 1 and 2, almost all clients rated their quality of lives in the average or very good ranges, and for Part 1 only 11 individuals scored in the poor range on quality of life. Of these 11 clients, six were only 3 points (out of 120) from falling into the average quality of life range and the lowest quality of life score was 59 for Part 1. At Part 2, only six clients scored in the poor range on quality of life, with a minimum score of 54. While there were some decreases between Part 1 and Part 2, the overall picture showed that clients' reported quality of life generally improved and was positive. Improvements in quality of life is one of the ultimate goals of harm reduction strategies (Joseph et al., 2000; Rogers & Ruefli, 2004), and improvements in quality of life suggest positive changes in many areas of a client's life and capture the overall change in lifestyle. This is a change that is frequently seen in those who are successful in methadone maintenance therapy (e.g., Capital Health, 2005; Dole & Nyswander, 1965; Judson et al., 1980; Simpson et al., 1982; Ward et al., 1999). As well, when discussing quality of life, methadone maintenance therapy clients typically mention themes of social relationships, psychological wellbeing, employment status, independence, and having a meaningful life (De Maeyer et al., 2011). Most of these themes emerged throughout this evaluation.

Additionally, between Part 1 and Part 2, clients, on average, reported a decrease in symptoms of anxiety and depression. A recent study found that 17.5% of First Nations adults reported psychological distress, indicative of likely experiencing challenges related to a moderate or severe mental disorder (First Nations Information Governance Centre, 2018). As well, 8.9% of First Nations adults reported that they had been diagnosed with anxiety, while 7.8% had been diagnosed with a mood disorder (First Nations Information Governance Centre, 2018). The rates

of psychological difficulties were also elevated for Indigenous individuals who used opioids (Jacobs & Gill, 2002), therefore a reduction in symptoms during treatment is even more positive.

More generally, clients also noted a decrease in physical health concerns and psychological distress. While clients often indicated that there were noticeable health related side effects to using methadone, it is positive that these side effects are not altering clients' views of their physical health in the long run. This may be related to the fact that opioid related morbidity includes the incidence of various serious diseases (e.g., cardiac arrhythmia, liver disease, renal disease, tuberculosis, and HIV; Currie & Wild, 2012; Kreek, 1978; Veilleux et al., 2010), therefore a reduction in symptoms related to these concerns may feel more discernable than the experienced side effects of methadone. As well, clients are able to receive physical health check-ups at the treatment centre, which may have also helped to improve their physical health during their time in treatment.

At Part 1 and 2, the relationship between self-rated improvement and support for the program, while not statistically significant, fell in the expected direction. This indicates that as self-rated improvement increases, ratings of support for the program increase. This result makes intuitive sense that those who are noticing improvements in themselves tend to feel better about the program (and vice versa), however as discovered in responses to qualitative questions, clients had many great things to say about the treatment centre. It is also possible that another factor (or factors) may have influenced clients' support for the program, such as their length of time enrolled in the program, for example.

Regarding clinician-rated improvement, only greater improvement at Part 2 related to an increase in ratings of support for the program. While results from Part 1 suggest that greater clinician-rated improvement means a decrease in ratings of support for the program, it is possible

that this is related to the fact that earlier in treatment, although improvements are apparent to clinicians at the treatment centre, clients may not yet personally see or feel what the program has done to assist them. Perhaps over time, clients may start to recognize their personal level of improvement.

At Part 1, greater connection to culture was related to greater treatment satisfaction (a subscale on the engagement measure) and to greater overall support for the program. This is suggestive of the importance of the cultural treatment components that CNTH offers, in that it increases positive perceptions of the program. Somewhat surprisingly however, at Part 1, greater connection to culture was related to lower treatment participation, counselling rapport, and peer support. This may be suggestive of cultural factors of the clients receiving treatment at CNTH. For example, Venner and colleagues (2018) discussed conflict between traditional Indigenous healing methods and the provision of methadone treatment in that traditional healing often includes being entirely free of all medications, which includes methadone. This suggests that a greater connection to culture may result in lower treatment participation (engagement) for Indigenous individuals receiving maintenance therapy. Wing and colleagues (1995) also suggested that for more spiritually connected Indigenous peoples, admitting difficulties with substances can be shameful, which may suggest that more time is required for commitment to and full engagement with treatment. Regarding counselling rapport and peer support, traditional healing often involves speaking with Elders, therefore seeking help through more Westernized counselling services and peer support may not be as desired for more culturally traditional Indigenous clients at CNTH. As well, counselling and peer support may require a level of intimacy that requires time to develop (Wing et al., 1995).

At Part 2, greater connection to culture became related to greater engagement in treatment in all areas (i.e., treatment participation, treatment satisfaction, counselling rapport, and peer support) and to greater support for the program. It is proposed that perhaps over time, individuals began to recognize that methadone was helpful in their recovery. It should be noted that at a point in time, CNTH's methadone prescribing physician was of the mindset that individuals would have to remain on methadone indefinitely, however the treatment centre did not support this belief, and a new physician was employed. Given the possible financial benefit for prescribing physicians to keep clients on methadone for longer periods of time than necessary, there is the potential for clients to be taken advantage of in that respect. It is also important to note that clinical practice guidelines suggest that an individual in treatment maintain a lengthy period of success in treatment prior to being tapered off of a maintenance medication and that this tapering process occur very gradually (Bruneau et al., 2018). Physicians likely differ somewhat in their level of liberalism on this guideline. Nonetheless, CNTH has their clients' best interests at the heart of program operation and a new methadone prescribing physician was sought who involves clients in their own care decisions and assists clients with tapering off of methadone when appropriate. This change in physician and greater potential for tapering off of methadone in the future may have also contributed to clients' increased ratings of treatment participation at Part 2.

The increase in ratings of counselling rapport and peer support in relation to greater cultural connectedness at Part 2 may be related to the passage of time, leading to increased trust of counsellors and peers, as was indicated to occur by Wing and colleagues (1995). Overall, the changes in relationships between traditional cultural connectedness and engagement from Part 1 to Part 2 provides support for the need of integrating methadone treatment with traditional

healing methods, as supported by various research studies and guidelines (e.g., Chong & Herman-Stahl, 2003; Health Canada et al., 2011; Jiwa et al., 2008; Mamakwa et al., 2017; Venner et al., 2018). Greater connection to culture was also related to lower self-rated improvement at both Part 1 and Part 2 of this evaluation, which is somewhat curious. Because the program at CNTH is intended to be culturally relevant, a greater connection to culture was expected to be related to greater self-rated improvement, however this result may again be related to the desire to be completely medication free before considering oneself to be traditionally healthy (Venner et al., 2018).

Descriptive results generally demonstrated that clients reported a decrease in drug use and high-risk behaviours and improvements in housing, employment status, and family support since admission to the program. These results tended to remain consistent or change minimally from Part 1 to Part 2. The majority of clients at Part 1 and Part 2 reported a decrease in drug use and high-risk behaviours since admission to the program, however less than half-reported a decrease in criminal behaviour. This is likely indicative of the fact that most clients would never have been involved in criminal activities throughout their lifetime, and therefore had no decrease to report. Perhaps more useful is the finding that very few clients (only five clients at Part 1 and two clients at Part 2) reported having new criminal convictions since admission to the program. A reduction in criminal activity was a commonly reported positive outcome of methadone maintenance therapy so it is encouraging to see that CNTH is seeing similar positive change in their clients (Ball et al., 1998; Dole & Nyswander, 1965; Fullerton et al., 2014; Joseph et al., 2000; Judson et al., 1980; McLellan et al., 2000; Simpson et al., 1982; Ward et al., 1999). Users of illicit opioids often spend a great deal of time finding, buying, and taking drugs, which can create a vicious cycle of criminal pursuits (Amato et al., 2005). To obtain illicit opioids, users

often become involved in criminal activities such as theft, violence, or prostitution (in exchange for money or drugs), which have legal implications such as incarceration (Amato et al., 2005; Kreek & Vocci, 2002; Ward et al., 1999; Wood et al., 2005), therefore seeing a reduction in criminal activity suggests a reduction in illicit substance use.

The majority of clients at both Part 1 and Part 2 reported an improvement in their housing condition since beginning treatment and also reported having adequate housing, with slight increases in rates between Part 1 and Part 2. This improvement in housing condition and the report of having adequate housing is positive as those who abuse substances are often considered "hard to house" related to the challenges of maintaining sobriety (Tsemberis, 2010). Tsemberis (2010) also suggested that improvements in an individual's living situation is often a beginning to crucial change in other areas of daily functioning for individuals recovering from substance abuse issues. Additionally, housing is often a concern for First Nations individuals specifically as 27.2% of individuals living in rural First Nations communities reported living in homes that require major repairs and 41.7% reported the presence of mold or mildew in their homes (First Nations Information Governance Centre, 2018).

Only a small proportion of clients reported an improvement in employment status at Part 1, however at Part 2, this rate increased by over 30%, indicating that the majority reported an improvement in employment status since admission to the program. The unemployment rate also decreased by approximately 10% between Part 1 and Part 2. While the unemployment rate among clients in treatment remained high, at both Parts 1 and 2, the rate was lower than the average unemployment rate of adults living on-reserve in rural First Nations communities in Canada (47.1%; First Nations Information Governance Centre, 2018). Of those First Nations adults who were unemployed, 28.4% were retired, 18.1% were in poor health or disabled, 17.2%

were stay at home parents, and 9.5% reported that there was no work available in their home communities (First Nations Information Governance Centre, 2018). Considering these reasons for unemployment, it is not surprising that the unemployment rate is elevated within clients receiving treatment at CNTH. Many clients may consider themselves to be in poor health while they are receiving treatment due to side effects of the medication and due to their current state of recovery from addiction. As well, there is a lack of available employment within the community, with larger city centers with opportunities for employment located over 70 km away.

The vast majority of clients reported an increase in family support since admission to the program at Part 1 and 2, with Part 2 rates slightly lower; almost all clients reported that they had adequate family support at Part 2, which was an increase from Part 1. This suggests that perhaps clients at Part 2 could not recall what their family support was like prior to admission, but recognized that they have appropriate family support in their lives currently. Indigenous individuals who abuse substances tend to report being highly concerned about family issues and note challenges with maintaining friendships (Jacobs & Gill, 2002); however, methadone maintenance therapy at CNTH appears to be assisting clients with overcoming these concerns. The relationship between improvement and having better family and peer relationships is supported in the literature as well. For example, Lavee and Altus (2009) found that those who remained drug-free had closer relationships with family members.

Clients rated the services received at CNTH positively. Detailed questions related to opinions of services were only asked at Part 1 as this was a lengthy questionnaire. The majority of clients felt excellent or mostly satisfied about most aspects of the program, including the program’s effectiveness at helping them deal with their problems, all services received, the personal manner of the staff, the help provided in improving relationships, the knowledge of

nursing staff, and the improvements in self-care. These areas indicate where the treatment center is most effective in the eyes of the clients and where current approaches should be maintained. Most of these areas also appear as themes gathered from the qualitative questions, therefore further discussion will be provided later on.

Areas that could use some improvement with the majority of ratings falling in the mixed range included helping close relatives to better understand their addiction, the information given about their addictions, help with establishing relationships outside of family, instructions they were given for what to do on their own between appointments, and help received to deal with the side effects of methadone. These areas indicate where clients would benefit from greater assistance. While the majority of clients reported that they have family support, this finding suggests that clients may have difficulty sharing their challenges with family members. This may also relate to requiring more information about their addictions. It is possible that some clients do not fully understand the details of their own addiction and therefore cannot communicate about this with family members. Perhaps educational sessions or workshops could be held that teach both clients and their families about addiction and these sessions could also provide information regarding side effects of methadone.

Clients also hoped for assistance with relationships outside of family. Given that those using substances generally have to find a new social group to avoid falling back to old habits when socializing with negative peer groups, social networking with healthy peers and recommendations on how to find healthy peers may be beneficial to clients. Finally, clients may benefit from assistance with daily activity scheduling as they were often unsure of how to handle their time between appointments. Boredom represents a risk for relapse and many clients noted

this on the qualitative questions, suggesting that this could be an area for further assistance to be provided (Corvinelli, 2007).

The majority of clients felt either excellent or mostly satisfied about methadone as a maintenance medication, considering their overall treatment, however some also noted mixed feelings. There is often a belief that methadone has worse side effects and withdrawal symptoms than other opioids and that methadone treatment is too disciplinary, controlling, regimented, and disempowering (Fischer, Chin, Kuo, Kirst, & Vlahov, 2002). Individuals receiving treatment at CNTH, however, appeared to report a more accepting attitude of methadone maintenance therapy as an overall treatment for opioid use problems, suggesting that the current group may not hold these common beliefs about methadone, possibly due to their level of experience with the benefits of the treatment.

Most individuals reported that they received help to improve their capacity to cope with life. Most who received this help found this assistance excellent or had mixed feelings about it. Of those who had not received this service, the majority were unsure if they would have liked this assistance, however a handful also noted that they would have liked this opportunity. Few clients reported receiving practical help at home from the treatment centre, however over a quarter of those who did not receive this help reported that they would have appreciated such an opportunity. Clients' responses indicated where further programming could be offered. Areas that clients indicated that they would appreciate additional programming is supported in the literature, which indicates that methadone treatment is most effective when social, medical, and psychological services are provided in combination (Centre for Addiction and Mental Health, 2016; Islam et al., 2013; McLellan et al., 1993; National Institutes of Health, 1999). CNTH

certainly offers an excellent complement of services, however there are components that clients would appreciate more assistance with.

Almost one third of clients had the opportunity to take part in leisure activities organized by the treatment centre and those who did were either mostly satisfied or had mixed feelings. Of those who were not given this opportunity, many reported they would have appreciated the option. This indicates clients' desires for leisure activities to be included as a part of programming and may suggest that the treatment centre is creating an environment where people wish to be involved. The majority of clients had not taken part in the Matrix program at the centre in the past month, but some would have liked to, which is another area for improvement. Of those who did take part, the program was rated highly. Few clients reported receiving help in joining activities outside of the program, but the majority would have liked to have received this assistance, which is another suggestion for future programming. Those who did receive these services rated them highly. Studies have suggested that boredom can be problematic for those in treatment for substance abuse issues and have found that taking steps to alleviate boredom can assist in treatment successes (e.g., Corvinelli, 2007). This further supports clients' requests for assistance with joining activities outside of the treatment program.

Discussion of Qualitative Client Results

The results of the qualitative client questions were generally congruent with the quantitative research data, however greater detail was provided. From Part 1, the most common theme that emerged as what would help clients most at this time was programming changes, followed by maintaining the program as it is, the desire to remain abstinent from substances, the desire to get off methadone, and the desire for more social support. These same themes emerged in Part 2. Regarding programming changes, clients commented that being permitted to have

carries would be helpful at this time. Currently, CNTH does not allow carries for their clients, however the general policy across Canada suggests that individuals should participate in daily methadone dispensing at a pharmacy for 8 months to achieve stabilization prior to being permitted to have six take home doses, allowing them to then visit the pharmacy only once per week (Eibl et al., 2017). The current clinical practice guidelines for methadone maintenance however, recommend that supervised methadone ingestion continue indefinitely for individuals with ongoing substance use or associated clinical or social instability. This indicates that CNTH would be following recommended guidelines if they were to allow their clients to have carries, however their clients also meet a level of risk that safely qualifies for indefinite supervised ingestion. CNTH is a community-based treatment centre which suggests unique factors and challenges specific to this community, therefore it is believed that CNTH will continue to keep their clients' best interests and safety in mind. CNTH aims to assist clients to full recovery and carries may or may not fit into that picture currently or in the future based on these unique client and community factors.

Under this theme, clients also noted that they would ideally appreciate being switched from methadone to Suboxone. While the transition from methadone to Suboxone is possible, it is more challenging than transitioning from Suboxone to methadone and may therefore be less recommended by prescribing physicians (Bruneau et al., 2018). As well, there are certain situations in which methadone is recommended above Suboxone, which are likely existing challenges for clients at CNTH (e.g., unstable housing, lack of social support, concurrent mental illness; Srivastava et al., 2017). It appears that CNTH is assisting clients in overcoming some of these challenges, so the potential to transition clients to Suboxone may be a realistic possibility, however again, this is ultimately determined based on a variety of community specific factors.

Clients also noted that having a longer window of time to receive their medication would be helpful as methadone and Suboxone doses are currently only provided from 10am until noon each day. This two-hour window makes it difficult for some clients to maintain employment and to arrive for their medication on a daily basis. Others commented on how more available transportation options would be useful. CNTH offers transportation for some clients, however this is limited due to restricted access to both vehicles and staff to operate the vehicles. Finally, others noted that being able to have other medication prescriptions filled at the treatment centre would be useful currently, as well as assistance finding employment and more counselling services.

The next theme that emerged under this question was maintaining the program as it is, where clients expressed gratitude for the program's existence and their dedication to their treatment. Clients also endorsed a theme of their desire to remain abstinent from substances and a theme of a desire to get off of methadone. Under the latter theme, clients appeared to recognize challenges related to tapering off of methadone, which is important as the period of time immediately after the conclusion of methadone treatment is related to increased overdose mortality (Sordo et al., 2017) and those who taper off of methadone are at a high risk of relapse within 1 year (Latowsky, 1996; Magura & Rosenblum, 2001; Milby, 1988). Approximately five clients at CNTH have successfully tapered off of methadone to date, however, which shows that it is possible and indicates that the prescribing doctor at CNTH has experience with helping clients do so. This is positive as the literature suggests that the strongest substitution programs offer assistance with tapering off of methadone (D'Aunno et al., 2015; Nosyk et al., 2012). While tapering is determined to be challenging, longer tapers are often more successful (Nosyk et al., 2012). Finally, under this question, clients endorsed a theme of a desire for more social

support from both peers and family members, which was endorsed through quantitative questions as well.

From Part 1, the most common theme that emerged about clients' experiences with the quality of care they have received at CNTH, was the helpfulness of the program, followed by the excellent staff, lifestyle changes, and minor concerns with the program. These same themes emerged in Part 2. Under the theme of the helpfulness of the program clients reported praise for the program. Regarding the theme of the excellent staff, clients commented on their appreciation for the doctors and nurses and expressed appreciation for being treated well. Further discussion of the importance of great staff relationships is to follow. Additionally, the recognition of lifestyle change as a theme was positive and reinforced observed quantitative results of improved quality of life among clients.

Clients noted minor concerns with the program as well, such as finding it difficult to visit the treatment centre every day, which is supported by the above discussion regarding clients' desire for carries. One client also noted that they feel infantilized at times by the program, which is a commonly expressed concern of methadone maintenance treatment. The literature shows that some choose not to enter methadone maintenance treatment because they believe the structure of the treatment is too strict, which ultimately demands too much for too little benefit (Fischer et al., 2002). Individuals often prefer to have more choice and freedom in their course of treatment than they believe methadone maintenance therapy can offer (Fischer et al., 2002). Convenience of maintenance medication dispensing that allows for efficient use of time (e.g., seeing a counselor during the same visit), as well as good relationships with the staff that dispense the medication have been noted to alleviate some of the stress related to the strict nature of the programming (Anstice, Strike, & Brands, 2009).

From Part 1, the most common theme that emerged as information that needs to be shared with others who are thinking about attempting methadone maintenance therapy, was shared cautions, followed by the required commitment, that the program helps, and specifics regarding dosage. These same themes emerged in Part 2. Under the theme of shared cautions, clients were honest in encouraging others to do their research prior to beginning treatment and they mentioned things like the potential side effects of methadone. The side effects of methadone are numerous and include things like backaches, constipation, sweating, body aches, weight gain, headaches, nausea, sleepiness, loss of sex-drive, numbness, and seizures (Fischer et al., 2002). Clients were also honest about the high level of commitment that methadone maintenance therapy requires, noting the strict rules and guidelines of the program and the long-term nature of the treatment. Again, this is realistic information to be understood by those considering methadone maintenance therapy.

Additionally, clients provided encouragement to others to take a chance and give the program a try, which is highly indicative of their appreciation and positive view of the program. Clients noted that the program returned normalcy to their lives, which was interesting as many clients also pointed out challenges related to having to visit the treatment centre each day. It is valuable to note that although the commitment was noted to be a challenge, clients believed that their lives returned to some level of “normal” while being in the program. Finally, clients commented on methadone dosage and tapering, which is supported by the literature. Current clinical practice guidelines for methadone maintenance treatment recommend a slow increase in dosage combined with a lengthy or indefinite period of daily witnessed ingestion (Bruneau et al., 2018).

Regarding what clients believed would lead them back to drug use, life problems was the most endorsed theme, followed by returning to their old lifestyle, nothing, using substances, and losing the treatment program. Three of these themes also emerged in Part 2. Under the theme of life problems, clients were honest that having a challenging life experience such as losing a loved one, a lack of employment, or even boredom, could lead them back to substance use. This is important information to glean from clients as it suggests where likely relapse potentials lie. The literature provides support for these causes for relapse and indicates that depression, low energy, drug cravings, withdrawal sickness, stress, and neurochemical changes to the brain are the most common reasons for relapse (Brown & Lawrence, 2009; Drug Policy Alliance, 2006; Sinha et al., 2007).

A return to their prior lifestyle was another commonly reported theme with individuals again noting that interacting with old peers or environments are risk factors for relapse. Many clients noted that there was nothing that could lead them back to drug use and while it is positive to discover that individuals are confident in their recovery, relapse is a serious concern for those in methadone maintenance therapy. The literature indicates that it is not a lack of will power that leads individuals back to substance use and notes that for some, relapse triggers will diminish over time, while for others they will not (Drug Policy Alliance, 2006).

Finally, clients also noted that losing the program could lead them back to substance use. Individuals recognized that remaining clean and sober is a daily struggle and that the treatment centre is there for guidance when needed. Clients noted that they would have nowhere to turn if the program were to disappear, which is a staggering point. Prior to the establishment of the treatment centre, clients were hitchhiking to Prince Albert daily for their medication, which is 72

km away. While medication assisted treatment is the standard of care, it is not often available in rural communities (Centre for Addiction and Mental Health, 2016; Eibl et al., 2017).

When asked what CNTH has done to assist clients to improve their lives, many themes emerged. The first theme, the existence of the program, again gave clients a chance to express their gratitude to the program and note that just having the program in existence has improved their lives. Other clients noted that they receive constant encouragement from CNTH, which again speaks to the excellent staff at the centre, while others mentioned the tools and education they have been provided. This appreciation for tools and education again supports the literature that treatment is most successful when psychosocial supports are provided alongside maintenance medication (Centre for Addiction and Mental Health, 2016).

Being treated with respect emerged as a common theme, which is not surprising given the challenges those in methadone maintenance therapy often face around stigma. In evaluations of other treatment programs, when negative interactions with staff were noted, complaints tended to focus on discriminatory feelings and this was the most powerful reason preventing people from entering or remaining in methadone treatment (Anstice et al., 2009; Joseph et al., 2000; National Institutes of Health, 1999).

Other themes that emerged included changing mindsets, in which clients discussed how their eyes have been opened, and a theme of nothing also emerged, with clients noting that the treatment centre had not yet assisted them with improving their lives. This theme of nothing only appeared in Part 1 responses, which suggests that some clients may have been too early in their treatment at Part 1 to identify improvements in their lives. Helping to stay clean and making life more manageable were also endorsed themes for this question.

When asked what CNTH could do better the main theme was nothing, followed by recommendations for change, greater flexibility, and more programming. The same four themes emerged for Part 2. Under the first theme, nothing, many clients reported that they were happy with how the program was currently operating and had no recommendations. This is valuable information as many clients had concerns with things such as the short time frame to receive their methadone and not being permitted to have carries, however other clients apparently did not find these limits as restricting on their lives.

The next most endorsed theme, recommendations for change, included suggestions around allowing carries and having longer hours to receive methadone, which have already been mentioned. Additionally, however, clients mentioned that waitlists to enter treatment are lengthy, which indicates that they are aware that others are interested in treatment or that they had to wait for long periods to enter the program themselves. This shows that there is still a need for the program and that the program has room for continued growth into the future. As mentioned, where maintenance therapies are available in rural communities, the demand tends to outweigh the capacity for treatment, therefore individuals often have to wait longer to begin treatment (Centre for Addiction and Mental Health, 2016; Eibl et al., 2017). However, because individuals in rural areas have had to wait longer to initiate treatment, they tend to have higher treatment retention rates (First Nations and Inuit Health, 2015; Mamakwa et al., 2017).

Greater flexibility was another commonly endorsed theme with clients generally commenting on the strict guidelines that the treatment centre has in place, for example, not giving up on people when they relapse, and not being "forced" to take the Matrix program. While clients may view these guidelines as somewhat controlling, these rules are based on the literature and on best practices for methadone treatment. CNTH operates under a "three strikes"

system where if clients miss their methadone dose three times, they are required to withdraw from the program. They also have a zero-tolerance policy on substance use while in the methadone program and clients undergo random urine screening for this. This process of urine screening follows recommended guidelines that suggest drug monitoring during methadone maintenance through urine screening (Kurdyak et al., 2011). Additionally, clients are required to participate in the Matrix program when first initiating treatment because again, it is best practice for methadone to be provided alongside other treatments (Centre for Addiction and Mental Health, 2016; Islam et al., 2013; McLellan et al., 1993; National Institutes of Health, 1999).

More programming was the final theme endorsed in this question with clients requesting the opportunity to have other prescriptions filled at the treatment centre, as well as an interest in more services from the Elder and for one-on-one counselling. Currently, clients likely have to travel to Prince Albert to fill prescriptions so it is understandable that this would be a beneficial service for them. There are of course, great complications related to being able to offer this service for the treatment centre. The request for more services from the Elder indicates that clients value the cultural components of the program. Clients having an interest in more access to counselling is also positive as it is well known and shown in the literature to improve the effectiveness of methadone maintenance therapy (Centre for Addiction and Mental Health, 2016; Islam et al., 2013; McLellan et al., 1993; National Institutes of Health, 1999).

Regarding the most liked aspect of the methadone maintenance therapy program at CNTH, clients primarily endorsed the theme of life change, followed by being off drugs, the staff, and specific program components. For Part 2, the same themes emerged. Under the theme of life change, similar comments were made as to previous questions, however others noted things like being more confident, being able to save money, and being out of jail. The next most

commonly endorsed theme was being off drugs, which again had many similar comments to previous questions, with the addition of a note about no longer having to inject drugs or being "harassed" for their medication in the community. Under the theme of the staff, clients noted similar things as previously mentioned about the "excellent" staff at CNTH. Regarding specific treatment components, similar comments were mentioned as well, however clients also commented on their appreciation for the treatment centre being close to home.

Finally, clients were asked about what they have disliked most about their experience to date with methadone maintenance therapy. The most endorsed theme was specific program components, followed by commitment, nothing, and abuse of the program. The same four themes emerged in Part 2. The same challenging program components were reported again by clients including things like time restraints, a need for more transportation, not being permitted to have carries, and the side effects of methadone. These appear to be commonly occurring challenges for clients at CNTH, and also for clients receiving methadone maintenance therapy in general, as already mentioned. Also, this is indicative of the success of CNTH as the majority of voiced concerns are things that are outside of the treatment centre's control or are related to practice guidelines that are being appropriately followed.

Clients also noted stigma that is experienced within the community as a challenge. Landry and colleagues (2016) conducted a study that explored community members' views of a methadone maintenance program in an Indigenous community in New Brunswick and they found that stigmatization of methadone clients was prevalent within the community. They noted that clients are commonly viewed in the community as being "always high" and they were also described as thieves and as untrustworthy (Landry et al., 2016). Clients were discriminated against by employers, and community members were surprised to learn to that clients participate

in regular urine drug testing, which refuted their beliefs that clients were continuing to use other substances (Landry et al., 2016). All of this gathered information illustrated that concern related to community stigma is legitimate and that communities may benefit from greater education to continue to reduce this stigma.

In Part 2, clients noted that they would appreciate assistance with getting their children back. In the 1960s, large numbers of Indigenous children were removed from their families, which is often referred to as the Sixties Scoop, however this colonizing practice is continued today and is now being termed the Millennial Scoop (First Nations Information Governance Centre, 2018). Clients at CNTH may benefit from assistance with having their children returned to their care as this is likely not an easy process to undergo. The next two primary themes, commitment and nothing did not elicit any new comments, however the last endorsed theme, abuse of the program, demonstrated clients' respect for the program. Clients noted that either themselves personally were abusing the program or they knew of others who had done so, which they disapproved of.

Discussion of Qualitative Staff Results

The results of the staff interviews were supportive of the information gathered from clients. The majority of staff reported that the main purpose of the methadone maintenance program is to help individuals get off of all drugs, followed by saving lives, and to provide awareness to the community. The fact that there was unanimous report for the purpose of helping clients to get off of drugs shows that all staff are on the same page, which illustrates the coherence of the whole treatment program. The theme of saving lives reinforces this theme as well. Staff also reported the importance of bringing awareness to the community about addiction and treatment. This is a meaningful purpose as this suggests that the treatment centre has

intentions for wide and meaningful change, outside of the individuals in treatment. The staff at the centre recognize that change must occur in the community as well as within the individuals. As Landry and colleagues (2016) reported, community stigma is a concern, in that community members perceive clients as being high and as involved in untrustworthy behaviours. They also recommended that the implementation of methadone maintenance programming in Indigenous communities involves community education to help the treatment to be accepted within the community and therefore, to be received respectfully (Landry et al., 2016). It appears that CNTH has made strides in reducing stigma within their communities, however ongoing education is always positive.

Regarding strengths of the methadone maintenance program, staff primarily noted the integrated nature of the program, followed by the friendly atmosphere, client improvement, accountability, accreditation, and the community. Staff's recognition of the integrated nature of the program fits well with the literature in that methadone maintenance therapy is most effective when it is offered with psychosocial programming such as counselling (Centre for Addiction and Mental Health, 2016). CNTH offers clients access to physicians and nurses, both individual and group therapy with psychologists and counsellors, as well as cultural services such as sweats and smudging. Clients are also provided education and the treatment centre as a whole has both inpatient and outpatient services, which adds to the well-roundedness of the treatment centre. One staff member noted that CNTH is not a "drive-thru," referring to pharmacy style locations where clients ingest their medication and leave. Studies have found that individuals feel more positively about visiting programs for methadone ingestion, when compared to visiting pharmacies (e.g., Anstice et al., 2009).

It was positive to learn that staff recognize the friendly atmosphere they create at the treatment centre as clients found this important as well. Client improvement is an excellent strength as well as this fits with the reported primary purpose of the methadone maintenance program. Accountability was another theme recognized by staff with an understanding that clients must visit the treatment centre on a daily basis and that they must follow strict guidelines to remain in the program. It was interesting that staff categorized this as the accountability of clients, a strength, whereas clients more often described these things as challenges. It appears that staff view a client coming into the centre each day as a sign that a client is accountable for and dedicated to their treatment, which may be a useful way to reframe the rules of the program to clients who become somewhat disgruntled at times.

The accreditation of CNTH is certainly a strength and this was recognized by staff. Staff recognize that their accreditation means that the treatment centre operates under certain guidelines and practices, which ensures that they are providing the best care possible and are maintaining certain standards. CNTH is partnered with First Nations and Inuit Health, provincial and regional health authorities, and with the college of Physicians and Pharmacists to ensure quality in their programming; staff also recognized that the treatment centre's director is instrumental in maintaining the success of the program. The location of the treatment centre within the community was noted as a strength as well, which was also endorsed by clients.

Staff members noted challenges that the program faces, which primarily included funding, followed by client factors, community factors, the long-term nature of methadone, and no problems. Under the challenge of funding it became clear that many staff members believed that the methadone maintenance program should have its own facility. Having observed how the methadone program dispenses methadone, this suggestion is understood. Clients enter the

treatment centre each day between 10am and 12pm through the front doors of the treatment centre, where they sign in, and wait in line outside of the nurse's office for their daily methadone dose. The nurse's office is located in a primary location in the treatment centre so in order for some sense of privacy to be provided for those waiting for methadone, a curtain is drawn across the hallway to divide this area from the main living space that is used by the inpatients. Essentially, to provide privacy for those receiving methadone, the inpatients are rerouted through a back hallway to access the kitchen or go outside during the supervised ingestion time. While CNTH has found creative ways to maintain privacy for methadone clients and inpatients are receptive to this re-routing, a separate facility for methadone dispensing would remove some minor daily disturbances to other parts of CNTH's programming.

Staff also noted that funding would allow the treatment centre to build a detox centre, to hire more staff, to have more vehicles for client transportation, and to be able to offer more programming. Client factors was another dominant theme and staff noted that there are occasional challenging incidents with disgruntled clients. The staff appear to be highly skilled at handling these situations when they arise, however they noted that this can be a challenge. As well, staff reported challenges associated with elderly clients, for example one client has to travel with an oxygen tank, which is difficult for him.

Staff reported that there are challenging community factors, such as a lack of employment opportunities within the community, as well as a lack of spirituality resulting from colonization. The treatment centre has attempted to overcome these challenges by finding employment opportunities for clients at the treatment centre. Approximately three of the staff members interviewed were past methadone maintenance therapy clients and others who are still in the program were employed at the treatment centre as well. Finally, staff reported that it is

challenging for clients to have to be on methadone for a long period of time, which clients also endorsed. Others noted that the treatment centre has no challenges.

Staff reported that the cultural services and Matrix program work well with the methadone maintenance therapy program, primarily discussing how clients can request cultural services if they would like to. Clients are able to take part in activities with an Elder and they are also permitted to request spiritual services under a “non-traditional denomination” if they prefer. This is important as culturally relevant treatment does not mean that treatment must follow traditional Indigenous practices. First Nations communities and individuals within communities differ in their connection to culture (Jiwa et al., 2008) and cultural relevance is defined as “acting in a culturally competent manner to ensure that any action based on culture respects the diversity of culture and is specific to the individual, family, or community” (Sullivan & National Native Addictions Partnership Foundation, 2013). Based on this definition, CNTH appears to be working from the perspective of cultural relevance and they put this into practice in treatment.

Regarding indicators of improvement in clients, staff responses fit into two themes. Staff tended to notice changes in thinking and changes in the lifestyles of their clients, which fits with the information previously discussed. The improvements that are observed by staff are positive and staff also recognized that clients have ups and downs throughout their journey, but they did not discount this. Staff members noted that, within the community, there are indicators of improvement as well. Staff reported that the community appears to have control of the addiction problem, which was represented through reductions in crime, seeing less people hitchhiking, and receiving less phone calls at the treatment centre about clients in the community. Staff noted that when the treatment centre opened, the community was not happy to have clients being taken off of one drug to be put on another, which is a common concern that community members have,

again as recently found by Landry and colleagues (2016). Fortunately, staff have noticed decreases in stigma within the community.

Staff reported that if the methadone maintenance therapy program had not been implemented at CNTH clients would continue to suffer from addiction, and there would be other noticeable differences within the community. Staff members essentially noted that many lives would be lost, both figuratively and literally and one staff member pointed at the cemetery out the window, indicating that many of the clients would likely be buried there. This is a disheartening, but legitimate acknowledgement as 13% of First Nations deaths between 2001 and 2005 were due to overdose (Milloy et al., 2010). Staff reported that other noticeable differences in the community would include crime rates remaining high, having more drug dealers around the community, and that the community would remain uneducated about addiction.

Staff provided three practical suggestions to improve the methadone maintenance program at CNTH and they primarily recommended additional programming including the addition of a detox program, which was noted as a challenge related to a lack of funding. Others had interesting suggestions such as a healthy eating program and job placement programs. Staff recognized that being able to provide carries would be useful to clients as well, which was highly endorsed by clients. One staff member also had an excellent suggestion to implement screening for motivation prior to program admission, which was related to a concern that clients are abusing the program or not fully committing to it. The literature suggests that the consideration of clients' perspectives on their treatment is a key aspect in the effectiveness of methadone therapy (Pérez de los Cobos et al., 2005), therefore it seems likely that screening for motivation would increase success as well. Improving physical demands was another suggestion for improvement with comments about the methadone program having its own location, needing

more inpatient beds, more vehicles, as well as an electronic program for maintaining medical records. All of these things fit well with the funding related challenges noted earlier. Three staff members noted that there was nothing the program could improve on and that they should continue to operate as they are.

Finally, staff reported two primary goals for the future of the methadone program, the first being to have all clients drug free. Staff reported that they hope that one day, all clients can become free of all substances, including methadone and they noted that this would cause them to be unemployed, however they still wished for this. Other staff members also noted that they would like to see the program grow to be able to support more clients and offer more programming. This is a reasonable goal as it shows that staff recognize that substance use remains a concern for many individuals and that there are still plenty of people to help. One staff member reported that they would like to see the program continue to operate as it is, and another reported that they would like to see the treatment centre assist other communities with developing similar centers in their communities to help their own community members.

Discussion of Overall Results

Considering the results of this evaluation more generally, it is apparent that the methadone maintenance program at CNTH is overcoming many of the common cultural and contextual barriers to treatment for opioid abuse that First Nations peoples typically face. For First Nations individuals living in remote areas, treatment traditionally requires referral to residential treatment centers outside of their communities (Chong & Herman-Stahl, 2003; Wiebe & Huebert, 1996), however CNTH's location means that individuals do not have to leave their community for this long period. Additionally, for those who do not wish to move from their community for this length of time, CNTH's location within the community means that those

receiving a daily methadone prescription are no longer required to travel to a city pharmacy every day. While the First Nations and Inuit Health Branch now provides financial assistance for this daily travel for those receiving maintenance medication therapy (Eibl et al., 2015), this does not eliminate the burdens associated with travelling an average of 100 km per day. Being able to access maintenance medication within the community appears to be much more convenient for clients at CNTH than travelling long distances daily, which may be reflected in the improvements seen in many areas such as family relationships and employment status. Individuals having more time to spend with family and to work may have contributed to the increases seen in these areas.

The location of CNTH also allows the treatment centre to follow the clinical practice guidelines of an indefinite period of supervised methadone ingestion for those who have less stability in their lives (Bruneau et al., 2018). While the fact that CNTH does not allow carries was often mentioned as a limitation of the program by clients, it is likely that this has helped clients to stabilize in many areas of their lives. Given the reductions seen in drug use and high risk behaviours and the increases in housing status, for example, it appears that improved stability is being achieved, or at least approached.

While maintenance therapy has been negatively associated with Indigenous identification in the past (Kerr et al., 2005), it seems that when treatment access barriers are overcome, this relationship may change. The location of the treatment centre may have eliminated the geographic and financial barriers for most clients of CNTH, but the services and programming offered may be overcoming cultural barriers as well. It has been suggested that relationships between clinicians and Indigenous clients can take time to develop (Wing et al., 1995). The results of this evaluation illustrate that clients appreciate the staff at CNTH and value the

relationships they have created, suggesting that the barrier of relationship development has been overcome. This relationship with staff is particularly important in the provision of psychosocial services such as counselling, which has been present in the strongest maintenance programs (Centre for Addiction and Mental Health, 2016; National Institutes of Health, 1999). Clients reported that they value counselling services and occasionally suggested that more services would be appreciated, which suggests the overcoming of this particular barrier to treatment as well.

While it seems that the common barriers faced among First Nations individuals seeking treatment for opioid abuse may be being overcome simply by the fact that retention rates at CNTH appear to be high, this study only evaluated those who sought treatment at CNTH. Because of this, information is not available to understand whether others are seeking treatment elsewhere and why. Nonetheless, it seems as though the program is addressing existing clients' needs by potentially overcoming their reported barriers. While retention rates were not specifically gathered within this evaluation, the majority of clients completed questionnaires at two time points up to 27 months apart. As well, while not formally gathered evidence, when visiting the treatment centre on three visits, the researcher had the opportunity to get to know the clients and continued to see the same clients at each visit. This is discussed further below. Other culturally appropriate treatment programs have seen retention rates as high as 84% (Mamakwa et al., 2017).

Further, appropriate treatment for Indigenous clients has a goal of matching those affected by substance use issues to services they require when they require them as identified by *Honouring Our Strengths* (Health Canada et al., 2011). As well, services should be effective, client-centered, and culturally safe (Health Canada et al., 2011), which CNTH appears to be

offering based on the results of this evaluation. Finally, CNTH is achieving the goal of a harm reduction approach to opioid abuse (Rogers & Ruefli, 2004) in that that a reduction in risky behaviours and harm associated with the use of opioids has been observed.

Limitations and Future Directions

The results of this evaluation must be interpreted while considering some limitations. First, the sample size in this study was small, which is likely responsible for the largely non-significant results. However, the present sample contained the majority of the clients in treatment at CNTH as only five clients declined participation and therefore the sample size could not be increased at this time. Power analysis indicated 84 as the required sample size to determine statistical equivalence, therefore it may be useful to conduct further evaluation once the number of clients at CNTH increases. Because the purpose of this study was to evaluate the methadone maintenance therapy program at CNTH, the relationships found are meaningful despite not reaching statistical significance. The relationships and descriptive information discussed provide indicators of the numerous strengths and minimal limitations of the program. Additionally, in the planning stages of this project, the researchers had hoped to be able to incorporate a waitlist control group, however, contacting this waitlist group regarding potential participation in the study proved to be implausible. Because CNTH is a community-based program, they do not maintain a formal waitlist. It seems that when CNTH is able to accept new clients, word gets around the community and clients who are ready for treatment visit the treatment centre.

While it appears that the common barriers faced among First Nations individuals seeking treatment for opioid abuse may be being overcome simply by the fact that retention rates at CNTH appear to be high, this study only evaluated those who sought treatment at CNTH. Because of this, information is not available to understand whether others are seeking treatment

elsewhere and why this may be. The apparent observed retention may simply be a cohort effect, therefore future research is necessary to determine if CNTH has addressed retention barriers and if the observed retention trends continue across future cohorts.

The administration of the questionnaires was another limitation of the present evaluation. Given the length of time required to complete the questionnaires, clients often preferred to take the questionnaires home to complete, which was permitted to allow a greater number of clients to participate. Clients often had commitments following their methadone ingestion and therefore could not spend the time necessary to complete the package at the treatment centre so taking it home was their only option for participation. This meant that clients likely completed their questionnaires over a longer period of time, rather than all in one sitting, which may have caused for some inconsistent responding. Generally, however, clients returned their questionnaires within one or two days after receiving it.

There were also limitations regarding the qualitative components of this research. For example, clients have an abundance of information about their experiences that would have been valuable to learn through interviews, however given the time they were already committing to the study by completing the lengthy questionnaire, it felt unreasonable to also ask them to also participate in an interview. Additionally, rapport took time to develop between the researchers and clients at CNTH and it appeared that those clients who were doing quite well, developed rapport more quickly, which may have resulted in a skewed sampling of client responses. Future evaluation may benefit from conducting interviews with clients rather than collecting quantitative data from them. Regarding interviews with staff, again, rapport took time to develop and staff members often presented as understandably ambivalent or nervous to speak with the researchers. This resulted in interviews being shorter than ideal. Additionally, due to this

ambivalence and nervousness, there is a possibility that staff members presented the maintenance program more positively due to difficulty sharing challenging topics with new people, and the desire to share the great things they are doing at CNTH.

Another limitation regarding time is that the time range between Part 1 and Part 2 questionnaire completion was not consistent among clients. To gather the amount of data that was collected, three visits to the community by the researchers were required. While it was hoped that the majority of clients would complete questionnaire packages during back to back visits, several clients completed Part 1 in December 2016 and then completed Part 2 in May, 2018. While the period of time between Part 1 and Part 2 was not consistent between clients, this is not believed to have affected the results significantly, but is something that could be address in the future.

Additionally, clients at CNTH were at various points in their treatment process. While some clients began maintenance treatment many years ago (e.g., 2010), others began treatment quite recently (e.g., 2017). The length of time that an individual has spent in treatment is likely to relate to changes in the variables measured during this study, however reporting of treatment initiation dates were not reliable enough to allow for effective evaluation of this. Future analyses could be conducted to explore the current relationship between length of time in the program and various factors, which may be especially useful in future evaluation with a larger sample size.

Finally, because a number of the clients involved in this evaluation were taking Suboxone, this evaluation does not provide support for either methadone or Suboxone as a maintenance medication specifically, but it does provide support for this community-based treatment approach to medication assisted therapy. Based on the already limited sample size of this evaluation and the unavailability of firm data on which clients were receiving Suboxone at

the various assessment points, methadone and Suboxone clients could not be separated for analyses. In the future, should the program continue to grow, it would be valuable to look at the differences between clients' perspectives on methadone versus Suboxone.

Conclusion

Canada's Indigenous populations experience high rates of prescription and non-prescription opioid use, which are associated with an elevation of negative opioid-related consequences. These high rates of opioid use result, in part, from the overprescribing of opioids in an attempt to manage both acute and chronic pain in patients. These prescribed medications are also diverted and used for non-medical purposes. With high rates of use come serious negative outcomes, most seriously, the risk of overdose mortality. The overdose death rate among First Nations populations is nearly three times that of the general population, which indicates the severity of the opioid epidemic in First Nations communities.

To understand these discrepancies between First Nations communities and the rest of Canada, Indigenous history must be considered. Indigenous peoples have faced a lengthy history of colonization, which detrimentally affects the health and wellbeing of communities, leading to high rates of substance use and associated challenges (among other things). This challenging history also leads Indigenous populations to experience unique barriers to accessing treatment, such as social, geographic, and financial issues. This suggests a need for treatment that is culturally relevant, and that is not to say that treatment must follow traditional practices, as each First Nations community and individual is unique in their connection to culture. However, considerations must be made for helping communities to overcome the unique cultural barriers that they face.

For the general Canadian population, medication assisted treatment supplemented with psychosocial services is considered the gold standard treatment for opioid related disorders, however these services are very rarely available to Indigenous populations based on the aforementioned barriers. Since 2011, however, CNTH has changed this for the community of Ahtahkakoop Cree Nation and the surrounding communities. As the first methadone maintenance therapy program to be located in a First Nations community in Canada, CNTH represents what culturally relevant treatment requires, and this evaluation has shown that they are succeeding.

Clients noted self-improvement as well as improved quality of life and reduced symptoms of anxiety, depression, and overall psychological distress. Staff noted improvements in clients as well. Decreases were found in drug use and high-risk behaviours and improvements were found in housing condition, employment status, and family support. Clients also spoke highly of the treatment centre’s programming and of staff at the centre, with overall experiences coming across as quite positive. Clients noted challenges of the program including things like not being permitted to have carries, the limited time available to receive their medication, as well as the side effects of methadone, however these challenges were also noted by staff, which shows how clients and staff appear to be on the same page when it comes to the program’s limitations. Staff noted that their primary goal is to see clients improve and become substance free, and they also spoke about the importance of the community’s support of the program. Staff noted challenges with funding, expressing a desire to have their own facility for the methadone program, and they also reported a desire to see the program continue to help people until the entire community is healed.

More generally, the methadone maintenance program at CNTH is overcoming many of the common cultural and contextual barriers to treatment for opioid abuse that First Nations peoples typically face. Individuals are no longer required to travel outside of their communities for treatment, which leaves more time for other important areas of life such as socialization and employment. As well, clients are developing important therapeutic relationships with staff at CNTH, which has been a noted barrier in the past. Retention in this maintenance program appears to be high and the harm reduction approach to opioid abuse is successfully reducing risky behaviours and opioid associated harms.

Overall, while the sample included in this evaluation was small, they provided useful insight into their experiences of the methadone maintenance program at CNTH. The results of both quantitative and qualitative client data certainly indicate that the program is succeeding in the eyes of the clients, despite the limitations and recommendations that have emerged. Staff data confirmed that they are proud of the work they are doing and that they are passionate for it. Again, limitations emerged from staff responses, however they did not appear discouraged when expressing these challenges.

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Table 1

Paired T-Test Results

	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		*t*	*df*	Sig. (2-tailed)	*d*
PGI 1 & PGI 2	-0.22	0.14	-0.51	0.07	-1.55	22	.14	0.33
CGI 1 & CGI 2	-0.21	0.18	-0.58	0.17	-1.13	33	.27	0.21
LSS 1 & LSS 2	-2.52	2.23	-8.33	3.30	-0.89	26	.38	0.19
PSY Anxiety 1 & PSY Anxiety 2	0.22	1.16	-2.17	2.61	0.19	25	.85	0.03
PSY Depression 1 & PSY Depression 2	1.42	1.29	-1.24	4.08	1.08	26	.28	0.20
HLTH Physical 1 & HLTH Physical 2	-0.06	0.97	-2.06	1.95	-0.06	23	.95	0.01
HLTH Psych Distress 1 & HLTH Psych Distress 2	1.31	1.85	-2.50	5.12	0.71	25	.49	0.16

Note. 1 = Part 1; 2 = Part 2; PGI = Patient Global Impression of Improvement scale (Trujols et al., 2011); CGI = Clinician Global Impression of Improvement scale (Guy, 1976; Trujols et al., 2011); LSS = Life Satisfaction Scale (Chubon, 1999); PSY Anxiety = Anxiety subscale of the TCU Client Evaluation of Psychological Functioning; PSY Depression = Depression subscale of the TCU Client Evaluation of Psychological Functioning (Garner et al., 2007; Joe et al., 2002); HLTH Physical = Physical Health subscale of the TCU Physical and Mental Health Status Screen; HLTH Psych Distress = Psychological Distress subscale of the TCU Physical and Mental Health Status Screen (Joe et al., 2004).

Table 2

Equivalence Test Results

	Part 1		Part 2		*t*	*p*	95 % Confidence Interval	
	M	*SD*	*M*	*SD*			Lower	Upper
PGI 1 & PGI 2	5.13	0.69	5.35	0.65	0.04	.52	-0.02	0.46
CGI 1 & CGI 2	4.85	0.66	5.06	1.25	-0.72	.24	-0.10	0.52
LSS 1 & LSS 2	86.78	13.39	89.30	12.87	-0.77	.22	-2.31	7.35
PSY Anxiety 1 & PSY Anxiety 2	31.76	8.08	31.54	7.88	1.44	.08	-2.20	1.76
PSY Depression 1 & PSY Depression 2	28.27	6.63	26.85	7.85	0.57	.29	-3.63	0.79
HLTH Physical 1 & HLTH Physical 2	18.48	5.49	18.54	6.37	-1.51	.07	-1.60	1.72
HLTH Psych Distress 1 & HLTH Psych Distress 2	21.38	6.71	20.08	9.30	0.93	.18	-4.46	1.86

Note. 1 = Part 1; 2 = Part 2; PGI = Patient Global Impression of Improvement scale (Trujols et al., 2011); CGI = Clinician Global Impression of Improvement scale (Guy, 1976; Trujols et al., 2011); LSS = Life Satisfaction Scale (Chubon, 1999); PSY Anxiety = Anxiety subscale of the TCU Client Evaluation of Psychological Functioning; PSY Depression = Depression subscale of the TCU Client Evaluation of Psychological Functioning (Garner et al., 2007; Joe et al., 2002); HLTH Physical = Physical Health subscale of the TCU Physical and Mental Health Status Screen; HLTH Psych Distress = Psychological Distress subscale of the TCU Physical and Mental Health Status Screen (Joe et al., 2004).

Table 3

Bivariate Correlations Between Client Impression of Improvement, Clinician Impression of Improvement, and Opinion of Services

Variable	1	2	3	4	5	6
1. PGI 1		.50*	-.13	.19	-.11	-.35
2. PGI 2			-.07	.33	.16	-.03
3. CGI 1				.53**	.02	-.30
4. CGI 2					.26	-.07
5. POS 1						.29
6. POS 2						

Note. 1 = Part 1; 2 = Part 2; PGI = Patient Global Impression of Improvement scale (Trujols et al., 2011); CGI = Clinician Global Impression of Improvement scale (Guy, 1976; Trujols et al., 2011); POS = Patient Opinion of Services (Pérez de los Cobos et al., 2005).
*$p < .05$. **$p < .01$. ***$p < .001$.

Table 4

Bivariate Correlations Between Connection to Culture, Engagement, Client Impression of Improvement, and Opinion of Services

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. CCS 1		.67**	-.02	.63**	.04	.53*	-.04	.67**	.22	.59**	.07	.20	.28	.28
2. CCS 2			.28	.32	.42*	.23	.47*	.40*	.67**	.48*	.05	.12	.31	.29
3. ENG TP 1				.66**	.82**	.32	.82**	.45*	.77**	.60**	.21	.65**	.12	-.18
4. ENG TP 2					.59**	.73**	.46*	.84**	.63**	.69**	.36	.50**	.33	-.21
5. ENG TS 1						.46*	.86**	.53**	.73**	.55**	-.06	.30	.26	.09
6. ENG TS 2							.30	.87**	.41*	.72**	.08	.03	.33	-.05
7. ENG CR 1								.39	.75**	.47*	.01	.31	.22	.14
8. ENG CR 2									.56**	.78**	.16	.25	.33	.05
9. ENG PS 1										.70**	-.03	.37	.26	.03
10. ENG PS 2											.18	.40*	.23	.17
11. PGI 1												.50*	-.11	-.35
12. PGI 2													.16	-.03
13. POS 1														.29
14. POS 2														

Note. 1 = Part 1; 2 = Part 2; CCS = Cultural Connection Scale (Snowshoe et al., 2012) ENG TP = Treatment Participation subscale of the TCU Client Evaluation of Treatment Engagement; ENG TS = Treatment Satisfaction subscale of the TCU Client Evaluation of Treatment Engagement; ENG CR = Counselling Rapport subscale of the TCU Client Evaluation of Treatment Engagement; ENG PS = Peer Support subscale of the TCU Client Evaluation of Treatment Engagement (Garner et al., 2007; Joe et al., 2002); PGI = Patient Global Impression of Improvement scale (Trujols et al., 2011); POS = Patient Opinion of Services (Pérez de los Cobos et al., 2005).
**p* < .05. ***p* < .01. ****p* < .001.

Table 5

Clients' Opinions of Services at Part 1

Items	Excellent (*n*; %)	Mostly satisfied (*n*; %)	Mixed (*n*; %)	Mostly dissatisfied (*n*; %)	Terrible (*n*; %)
Overall feeling about effect of program in helping deal with problems	12; 26.09%	23; 50%	9; 19.57%	2; 4.35%	-
Overall feeling about all services received	12; 26.09%	22; 47.83%	11; 23.91%	1; 2.17%	-
Overall feeling about personal manner of staff	19; 41.3%	19; 41.3%	7; 15.22%	1; 2.17%	-
Overall feeling about effectiveness of program in helping to improve relationships with close relatives	14; 30.43%	20; 43.48%	12; 26.09%	-	-
Overall feeling about effectiveness of services in helping close relatives to better understand problems	9; 19.57%	13; 28.26%	19; 41.3%	1; 2.17%	2; 4.35%%
Overall feeling about knowledge of nursing staff on current and past diseases	13; 28.26%	12; 26.09%	13; 28.26%	2; 4.35%	-
Overall feeling about information received about diagnosis and evolution of addiction	10; 21.74%	11; 23.91%	19; 41.3%	2; 4.35%	1; 2.17%
Overall feeling about effectiveness of service in helping establish good relationships with people outside family	9; 19.57%	15; 32.61%	15; 32.61%	2; 4.35%	1; 2.17%
Overall feeling about instructions about what to do on own between appointments	6; 13.04%	16; 34.78%	20; 43.48%	1; 2.17%	-
Overall feeling about effectiveness of service in helping to improve self-care	10; 21.74%	29; 63.04%	6; 13.04%	1; 2.17%	-
Overall feeling about ability of staff to listen to and understand problems	14; 30.43%	19; 41.3%	8; 17.39%	2; 4.35%	-
Overall feeling about help received for side effects of methadone	14; 30.43%	12; 26.09%	13; 28.26%	1; 2.17%	2; 4.35%
Overall impression about methadone as a medication for carrying out maintenance treatment of opioid dependence	6; 13.04%	25; 54.35%	13; 28.26%	-	1; 2.17%

Note. Responses on the Verona Service Satisfaction Scale for Methadone Treatment (VSSS-MT; Pérez de los Cobos et al., 2002).

Table 6

Clients' Opinions of Services at Part 1 Continued

Items	If yes: Rating of service					If no: Would have liked to receive service?		
	Excellent (*n*; %)	Mostly satisfied (*n*; %)	Mixed (*n*; %)	Mostly dissatisfied (*n*; %)	Terrible (*n*; %)	Yes (*n*; %)	No (*n*; %)	Don't know (*n*; %)
Did you receive help from staff to improve capacity to cope with social and working life?	Yes: 23; 50%					No: 22; 47.82%		
	11; 47.83%	8; 34.78%	11; 47.83%	-	-	4; 18.18%	4; 18.18%	13; 59.09%
Did you have opportunity to take part in leisure activities organized by methadone program?	Yes: 14; 30.43%					No: 32; 69.57%		
	5; 35.71%	6; 42.86%	6; 42.86%	-	-	15; 46.88%	6; 18.75%	16; 50%
Did you take part in Matrix program?	Yes: 11; 23.91%					No: 33; 71.74%		
	7; 63.64%	2; 18.18%	2; 18.18%	-	-	8; 24.24%	10; 30.3%	10; 30.3%
Did you receive practical help at home from centre?	Yes: 5; 10.87%					No: 40; 86.96%		
	1; 20%	1; 20%	1; 20%	1; 20%	-	11; 27.5%	12; 30%	12; 30%
Did you receive help from centre to join leisure activities separate from methadone program?	Yes: 8; 17.39%					No: 37; 80.43%		
	3; 37.5%	1; 12.5%	3; 37.5%	-	-	13; 35.14%	8; 21.62%	11; 29.73%

Note. Responses on the Verona Service Satisfaction Scale for Methadone Treatment (VSSS-MT; Pérez de los Cobos et al., 2002).

Appendix A

Interview Questions

1. What do you feel is the main purpose of the methadone maintenance therapy program at Cree Nations Treatment Haven (CNTH)?

2. What are the main strengths of the methadone maintenance therapy program at CNTH?

    2b. Which strength is most important?

3. What are the main challenges/barriers of the methadone maintenance therapy program at CNTH?

    3b. Which challenge/barrier is most evident?

4. Do the services provided (e.g., cultural services, matrix program) work well with the methadone maintenance therapy program to meet the needs of the clients at CNTH?

5. What are your indicators of improvement in clients? In the community?

6. What would Ahtahkakoop Cree Nation (and Pelican Lake, Witchekan Lake, and Big River) be like if the methadone maintenance program at CNTH had not been implemented?

    5a. What changes have you seen in the communities?

7. What are your top three practical suggestions to improve the methadone maintenance program at CNTH?

8. What would be your main goal for the future of the methadone maintenance therapy program at CNTH?

Appendix B

Questionnaire Package

Cree Nations Treatment Haven's Methadone Maintenance Program Evaluation

In Treatment Questionnaire Package

The information inside this box will be completed by researchers:

Client ID Number: ____________________

Date Today (record date in this format: September 12, 2014): ___________________________

Instructions

The following questions can be answered independently or with the help of the researchers, so if you would like assistance please inform the person who gave you this package.

Please take your time and answer the questions carefully and honestly. While thinking about the questions, try to answer them based on your life over the past month (unless specified otherwise). Where questions require you to write in an answer, please write as clearly as possible. Where questions give you options to choose from please place an ✗ or ✓ in the appropriate place.

Please do not include your name or any other identifying information anywhere on the package.

When you have completed all of the questions, please return the package to the person who gave it to you.

Thank you very much for your participation in the evaluation of Cree Nations Treatment Haven’s Methadone Maintenance program. We value your input greatly.

Demographics

1. Your age: ____________ years

2. Your sex: Male________ Female _______ Other _________

3. Your ethnicity (e.g., First Nation, Cree): _______________________

4. Your relationship status:
    Single ______
    Dating ______
    Separated ______
    Married ______
    Divorced ______
    Cohabiting (i.e., living with your partner) ______
    Widowed ______
    Other (please specify) ______________________

5. What is the highest education you have completed?
    Less than Elementary _______
    Elementary Completed _______
    Some Junior High
    Junior High Completed _______
    Some High School _______
    High School or GED Completed _______
    Some Post-Secondary _______
    Post-Secondary Completed _______

6. Where are you living currently?
    With family or other relatives _______
    With a group of friends (or non-family members) _______
    Alone in your own dwelling _______
    Homeless _______
    In a hospital, rehabilitation facility, or nursing home _______
    In a jail, prison, or other correctional facility _______
    Other (specify) ____

7. How long have you been living at that place? _____________________________

8. Where were you living before you began treatment with CNTH?
With family or other relatives _______
With a group of friends (or non-family members) _______
Alone in your own dwelling _______
Homeless _______
In a hospital, rehabilitation facility, or nursing home _______
In a jail, prison, or other correctional facility _______
Other (specify) ____

9. When did you begin treatment at Cree Nations Treatment Haven?
(month) ________________ (day) ________ (year) ________

10a. Are you currently part of the MATRIX program? Yes _______ No _______

10b. When did you first enter the MATRIX program?
(month) ________________ (day) ________ (year) ________

10c. When did you first complete the MATRIX program?
(month) ________________ (day) ________ (year) ________

10d. How many times have you participated in the MATRIX program? ________

LSS

A number of statements which concern different aspects of your PRESENT life situation are listed below. Read each statement and indicate the extent to which you agree or disagree with each statement by placing an ✗ or ✓ in the appropriate place.

	AGREE VERY STRONGLY	AGREE STRONGLY	AGREE	DISAGREE	DISAGREE STRONGLY	DISAGREE VERY STRONGLY
1. I feel safe and secure.	○	○	○	○	○	○
2. My health is good.	○	○	○	○	○	○
3. I have too few friends who I can count on.	○	○	○	○	○	○
4. I like myself the way I am.	○	○	○	○	○	○
5. I am better off than most people in my community.	○	○	○	○	○	○
6. I feel constantly under pressure.	○	○	○	○	○	○
7. I don't eat very well.	○	○	○	○	○	○
8. My future is hopeless.	○	○	○	○	○	○
9. I am a happy person.	○	○	○	○	○	○
10. There are always people willing to help me when I really need it.	○	○	○	○	○	○
11. My income is a constant source of worry.	○	○	○	○	○	○
12. My sleep is restful and refreshing.	○	○	○	○	○	○
13. I don't get the love and affection I need.	○	○	○	○	○	○
14. I don't have any fun or relaxation.	○	○	○	○	○	○
15. Services provided by the government and other public agencies meet my needs.	○	○	○	○	○	○
16. I am able to go when and where I need to go.	○	○	○	○	○	○

	VERY STRONGLY AGREE	AGREE STRONGLY	AGREE	DISAGREE	DISAGREE STRONGLY	VERY STRONGLY DISAGREE
17. I am satisfied with my main life role now (for example, as a worker, student, homemaker, retiree, or patient)	O	O	O	O	O	O
18. There is little that I am able to enjoy in my community and surroundings.	O	O	O	O	O	O
19. I am exhausted well before the end of the day.	O	O	O	O	O	O
20. I have too little control over my life.	O	O	O	O	O	O

CCS

ABOUT MY CULTURE

The following questions ask about being [Aboriginal/First Nations, Métis or Inuit] and culture:

1.	I know my cultural/spirit name.	O No	O Yes
2.	I can understand some of my [Aboriginal or First Nations/Métis/Inuit] language.	O No	O Yes
3.	In certain situations, I believe things like animals and rocks have a spirit like [Aboriginal or First Nations/Métis/Inuit] people.	O No	O Yes
4.	I use tobacco for guidance.	O No	O Yes
5.	I have participated in a cultural ceremony (examples: Sweatlodge, Moon Ceremony, Sundance, Longhouse, Feast, or Giveaway).	O No	O Yes
6.	I have helped prepare for a cultural ceremony (examples: Sweatlodge, Moon Ceremony, Sundance, Longhouse, Feast or Giveaway).	O No	O Yes
7.	I have offered food or feasted someone/something for a cultural reason.	O No	O Yes
8.	Someone in my family or someone I am close with attends cultural ceremonies (examples: Sweatlodge, Moon Ceremony, Sundance, Longhouse, Feast or Giveaway).	O No	O Yes
9.	I plan on attending a cultural ceremony in the future (examples: Sweatlodge, Moon Ceremony, Sundance, Longhouse, Feast or Giveaway).	O No	O Yes
10.	I plan on trying to find out more about my [Aboriginal or First Nations/Métis/Inuit] culture, such as its history, traditions and customs.	O No	O Yes
11.	I have a traditional person, Elder or Clan Mother who I talk to.	O No	O Yes

		Strongly Disagree	Disagree	Do Not Agree or Disagree	Agree	Strongly Agree
12.	I have spent time trying to find out more about being [Aboriginal or First Nations/Métis/Inuit], such as its history, traditions and customs.	O	O	O	O	O
13.	I have a strong sense of belonging to my [Aboriginal or First Nations/Métis/Inuit] community or Nation.	O	O	O	O	O
14.	I have done things that will help me understand my [Aboriginal or First Nations/Métis/Inuit] background better.	O	O	O	O	O
15.	I have talked to other people in order to learn more about being [Aboriginal or First Nations/Métis/Inuit].	O	O	O	O	O
16.	When I learn something about my [Aboriginal or First Nations/Métis/Inuit], I will ask someone more about it later.	O	O	O	O	O

	Strongly Disagree	Disagree	Do Not Agree or Disagree	Agree	Strongly Agree
17. I feel a strong attachment towards my [Aboriginal or First Nations/Métis/Inuit] community or Nation.	O	O	O	O	O
18. If a traditional person, Elder, or Clan Mother spoke to me about being [Aboriginal or First Nations/Métis/Inuit], I would listen to them carefully.	O	O	O	O	O
19. I feel a strong connection to my ancestors.	O	O	O	O	O
20. Being [Aboriginal or First Nations/Métis/Inuit] means I sometimes have a different way of looking at the world.	O	O	O	O	O
21. The eagle feather has a lot of meaning to me.	O	O	O	O	O
22. It is important to me that I know my [Aboriginal or First Nations/Métis/Inuit] language.	O	O	O	O	O
23. When I am physically ill, I look to my [Aboriginal or First Nations/Métis/Inuit] culture for help.	O	O	O	O	O
24. When I am overwhelmed with my emotions, I look to my [Aboriginal or First Nations/Métis/Inuit] culture for help.	O	O	O	O	O
25. When I need to make a decision about something, I look to my [Aboriginal or First Nations/Métis/Inuit] culture for help.	O	O	O	O	O
26. When I am feeling spiritually disconnected, I look to my [Aboriginal or First Nations/Métis/Inuit] culture for help.	O	O	O	O	O

	Never	Once/ Twice in the Past Year	Every Month	Every Week	Every Day
27. How often do you make tobacco offerings for cultural purposes?	O	O	O	O	O
28. How often do you use sage, sweetgrass, or cedar in any way or form?	O	O	O	O	O
29. How often does someone in your family or someone you are close with use sage, sweetgrass, or cedar in any way or form?	O	O	O	O	O

TCU PSY

Please indicate how much you agree or disagree with each statement based on the LAST MONTH.

	Disagree Strongly	*Disagree*	*Uncertain.*	*Agree*	*Agree Strongly*
1. You have trouble sleeping.	○	○	○	○	○
2. You have much to be proud of.	○	○	○	○	○
3. You consider how your actions will affect others.	○	○	○	○	○
4. You plan ahead.	○	○	○	○	○
5. You feel interested in life.	○	○	○	○	○
6. You feel like a failure.	○	○	○	○	○
7. You have trouble concentrating or remembering things.	○	○	○	○	○
8. You feel afraid of certain things, like elevators, crowds, or going out alone.	○	○	○	○	○
9. You feel anxious or nervous.	○	○	○	○	○
10. You wish you had more respect for yourself.	○	○	○	○	○
11. You are likely to feel the need to use drugs in the next few months.	○	○	○	○	○
12. You feel sad or depressed.	○	○	○	○	○
13. You think about probable results of your actions.	○	○	○	○	○
14. You feel extra tired or run down.	○	○	○	○	○
15. You have trouble sitting still for long.	○	○	○	○	○
16. You think about what causes your current problems.	○	○	○	○	○
17. You are likely to drink alcohol in the next few months.	○	○	○	○	○
18. You think of several different ways to solve a problem.	○	○	○	○	○
19. You feel you are basically no good.	○	○	○	○	○

	Disagree Strongly	***Disagree***	***Uncertain.***	***Agree***	***Agree Strongly***
20. You worry or brood a lot.	○	○	○	○	○
21. You have trouble making decisions.	○	○	○	○	○
22. You feel hopeless about the future.	○	○	○	○	○
23. You make good decisions.	○	○	○	○	○
24. You are likely to relapse in the next few months. ... ○	○	○	○	○	
25. In general, you are satisfied with yourself.	○	○	○	○	○
26. You make decisions without thinking about consequences.	○	○	○	○	○
27. Please fill in the "Disagree" box as your response for this question.	○	○	○	○	○
28. You feel tense or keyed up.	○	○	○	○	○
29. You feel you are unimportant to others.	○	○	○	○	○
30. You feel tightness or tension in your muscles.	○	○	○	○	○
31. You are likely to have problems in quitting drug use.	○	○	○	○	○
32. You feel lonely.	○	○	○	○	○
33. You analyze problems by looking at all the choices.	○	○	○	○	○

TCU HLTH

1. How many times in the PAST MONTH have you gone to a hospital or clinic or seen a doctor or nurse for health problems?

O None O 1 time O 2-3 times O 4-10 times O Over 10 times

During the PAST MONTH, how often have you had any of these problems or types of diseases –

	None of the time	*A little of the time*	*Some of the time*	*Most of the time*	*All of the time*
2. stomach problems or ulcers?	O	O	O	O	O
3. bone/joint problems?	O	O	O	O	O
4. kidney infection or problems?	O	O	O	O	O
5. bladder infection or problems?	O	O	O	O	O
6. liver or gall bladder problems?	O	O	O	O	O
7. intestinal or bowel problems?	O	O	O	O	O
8. heart disease or problems?	O	O	O	O	O
9. sexually transmitted disease (STD)?	O	O	O	O	O
10. skin disease or skin problems?	O	O	O	O	O
11. other medical or physical problems?	O	O	O	O	O

During the PAST MONTH, how often did you feel –

12. tired out for no good reason?	O	O	O	O	O
13. nervous?	O	O	O	O	O
14. so nervous that nothing could calm you down?	O	O	O	O	O
15. hopeless?	O	O	O	O	O
16. restless or fidgety?	O	O	O	O	O
17. so restless that you could not sit still?	O	O	O	O	O
18. depressed?	O	O	O	O	O
19. so depressed that nothing could cheer you up?	O	O	O	O	O
20. that everything was an effort?	O	O	O	O	O
21. worthless?	O	O	O	O	O

TCU FMFR

Describe your relationships with your FAMILY – that is, parents, brothers/sisters, grandparents, aunts/uncles, etc. – during the LAST MONTH.

How strongly do you disagree or agree with the following statements?

	Disagree Strongly	*Disagree*	*Uncertain*	*Agree*	*Agree Strongly*
1. Your family got along well together.	○	○	○	○	○
2. You really enjoyed being together.	○	○	○	○	○
3. Your family drank alcohol together.	○	○	○	○	○
4. You got drunk together.	○	○	○	○	○
5. You used other (illegal) drugs together.	○	○	○	○	○
6. You had serious talks about each other's interests and needs.	○	○	○	○	○
7. Your family helped each other deal with problems. .	○	○	○	○	○
8. You got blamed or fussed at about things YOU did or did not do.	○	○	○	○	○
9. You and your family often had disagreements. .	○	○	○	○	○
10. You had serious arguments or fights in your family.	○	○	○	○	○

Describe your relationships with people you consider to be your FRIENDS in the LAST MONTH.

How strongly do you disagree or agree with the following statements?

	Disagree Strongly	*Disagree*	*Uncertain*	*Agree*	*Agree Strongly*
11. Your friends spend time together with their families eating meals or watching TV.	○	○	○	○	○
12. They liked being with their families.	○	○	○	○	○
13. Your friends usually worked regularly on a job. ...	○	○	○	○	○
14. They felt hopeful about their future.	○	○	○	○	○

	Disagree Strongly	*Disagree*	*Uncertain*	*Agree*	*Agree Strongly*
15. They got into loud arguments or fights with other people.	O	O	O	O	O
16. Your friends liked to get drunk.	O	O	O	O	O
17. They used other (illegal) drugs.	O	O	O	O	O
18. They traded, sold, or dealt drugs.	O	O	O	O	O
19. Your friends did other things against the law.	O	O	O	O	O
20. Some spent time in “gang” activities.	O	O	O	O	O
21. Some got arrested or had problems with the law.	O	O	O	O	O

TCU ALC

Please mark answers based on drinking alcohol during the PAST MONTH.

	0	*1-2*	*3-4*	*5-6*	*7*
1. On average, how many days each week did you drink any beer, wine, wine coolers, or hard liquor?...	○	○	○	○	○
2. On average, how many days each week did you ever have 5 or more drinks in a row?	○	○	○	○	○
3. On average, how many days each week did you ever have 3 or more drinks within a 1-hour period?	○	○	○	○	○

	0-2	*3-4*	*5-6*	*7-10*	*11+*
4. On average, how many drinks (cans, glasses, shots) did you have on each of those drinking days?	○	○	○	○	○

In the LAST MONTH, did your alcohol use ever lead to…

	YES	NO
5. problems getting to work or school on time, or caring for children?	○	○
6. dangers for you or others while driving or operating machinery?	○	○
7. fights or arguments with family or friends?	○	○
8. needing to have more drinks to feel their effects?	○	○
9. drinking early in the day to avoid having shakes or tremors?	○	○
10. having more drinks than you really wanted or intended?	○	○
11. trying without success to reduce your drinking?	○	○
12. giving over more of your time for drinking?....	○	○
13. forgetting about meetings or events with family or friends?	○	○
14. having poor attention and concentration, or emotional troubles?	○	○
15. craving or having strong urges to take a drink?	○	○

TCU CEL

Please mark answers based on the PAST MONTH

	0	*1-2*	*3-4*	*5-6*	*7*
1. On average, how many days each week did you spend time while "clean and sober" doing things with your family or friends?................................	○	○	○	○	○
2. On average, how many days each week did you ever attend group support (AA/NA/CA) or other self-help meetings?	○	○	○	○	○
3. On average, how many days each week did you spend time hanging out with someone "high" on alcohol or drugs?	○	○	○	○	○
4. On average, how many days each week did you have "no regular place" to live or spend the nights?	○	○	○	○	○
5. On average, how many days each week did you ever get into fights or loud arguments?	○	○	○	○	○
6. On average, how many days each week did you spend working the "full day" on a paid job or at school?..	○	○	○	○	○
7. On average, how many days each week did you spend working just "part of the day" for pay, or to help someone in need?	○	○	○	○	○

	0-2	*3-4*	*5-6*	*7-10*	*11+*
8. Altogether, how many TIMES have you needed a doctor (or medical care) for an injury or sickness?	○	○	○	○	○
9. How many TIMES were you arrested (taken to the police station)?	○	○	○	○	○
10. How many TIMES were you locked up in a jail or prison?	○	○	○	○	○

TCU SOC

Please indicate how much you agree or disagree with each statement based on the LAST MONTH.

	Disagree Strongly	*Disagree*	*Uncertain*	*Agree*	*Agree Strongly*
1. You have people close to you who motivate and encourage your recovery.	○	○	○	○	○
2. You have never deliberately said something that hurt someone's feelings.	○	○	○	○	○
3. You only do things that feel safe.	○	○	○	○	○
4. You are sometimes irritated by people who ask favours of you.	○	○	○	○	○
5. You have close family members who want to help you stay away from drugs.	○	○	○	○	○
6. You have good friends who do not use drugs.	○	○	○	○	○
7. When you do not know something, you do not at all mind admitting it.	○	○	○	○	○
8. You have carried weapons like knives or guns.	○	○	○	○	○
9. You have people close to you who can always be trusted.	○	○	○	○	○
10. You feel a lot of anger inside you.	○	○	○	○	○
11. You sometimes try to get even rather than forgive and forget.	○	○	○	○	○
12. You have a hot temper.	○	○	○	○	○
13. You like others to feel afraid of you.	○	○	○	○	○
14. You are always willing to admit it when you make a mistake.	○	○	○	○	○
15. You feel mistreated by other people.	○	○	○	○	○
16. You avoid anything dangerous.	○	○	○	○	○
17. You have people close to you who understand your situation and problems.	○	○	○	○	○
18. You are very careful and cautious.	○	○	○	○	○

	Disagree Strongly	Disagree	Uncertain	Agree	Agree Strongly
19. There have been occasions when you took advantage of someone.	O	O	O	O	O
20. You work in situations where drug use is common.	O	O	O	O	O
21. You have people close to you who expect you to make positive changes in your life.	O	O	O	O	O
22. You can remember "playing sick" to get out of something.	O	O	O	O	O
23. No matter who you are talking to, you are always a good listener.	O	O	O	O	O
24. You get mad at other people easily.	O	O	O	O	O
25. You have people close to you who help you develop confidence in yourself.	O	O	O	O	O
26. You like to do things that are strange or exciting.	O	O	O	O	O
27. You have felt like rebelling against people in authority even when they were right.	O	O	O	O	O
28. You have urges to fight or hurt others.	O	O	O	O	O
29. Please fill in the "Agree" box as your response for this question.	O	O	O	O	O
30. You like to take chances.	O	O	O	O	O
31. You have people close to you who respect you and your efforts.	O	O	O	O	O
32. Occasionally, you gave up doing something because you thought too little of your ability.	O	O	O	O	O
33. You like the "fast" life.	O	O	O	O	O
34. You like friends who are wild.	O	O	O	O	O
35. You sometimes feel resentful when you do not get your way.	O	O	O	O	O
36. Your temper gets you into fights or other trouble.	O	O	O	O	O

TCU RSK

Please mark answers to the series of questions listed below.

1. How much of the time in the PAST MONTH were you locked up (i.e., not living in the 'free world")?

- ○ None
- ○ Less than 1 week
- ○ 1-2 weeks
- ○ 2-4 weeks

In the PAST MONTH were you ever –

2. employed full time (35+ hrs/week)? .... ○ *No* ○ *Yes*

3. unemployed and NOT looking for work? .... ○ *No* ○ *Yes*

4. receiving any public financial support (food stamps, disability, public assistance)? .... ○ *No* ○ *Yes*

5. on parole or probation? .... ○ *No* ○ *Yes*

6. treated in an emergency room? .... ○ *No* ○ *Yes*

7. treated for a mental health problem? .... ○ *No* ○ *Yes*

8. treated for an alcohol use problem? .... ○ *No* ○ *Yes*

9. treated for illegal drug use? .... ○ *No* ○ *Yes*

10. arrested? .... ○ *No* ○ *Yes*

11. in jail or prison? .... ○ *No* ○ *Yes*

MEQ

DRUG USE / HIGH RISK BEHAVIOURS

1. Would you consider your drug use and high-risk behaviours have been reduced since admission to the CNTH methadone program? (check one)

☐ Yes ☐ No

HOUSING

2. Are you homeless? (check one) ☐ Yes ☐ No

3. Do you have adequate housing? (check one) ☐ Yes ☐ No

4. Have you changed residences since admission to the CNTH methadone program? (check one)

☐ Yes ☐ No

5. If you have changed residence since admission, how many times? _____

6. Would you consider your housing condition has improved since admission? (check one)

☐ Yes ☐ No

EMPLOYMENT STATUS

7. Please select which employment status currently applies to you (check one)

☐ full-time employment

☐ part-time employment

☐ seasonal employment

☐ homemaker

☐ student

☐ disabled

☐ retired

☐ unemployed

8. Would you consider your employment status has improved since you started the program at CNTH? (check one) ☐ Yes ☐ No

CRIMINAL CONVICTIONS

9. Have you had any new criminal convictions since you started the program at CNTH? (check one) ☐ Yes ☐ No

10. If you have had new criminal convictions since you started the program at CNTH, how many? __________

11. If you had previously engaged in criminal behaviour, would you consider there has been a decrease in your criminal behaviour since you started the program at CNTH? (check one)

☐ Yes ☐ No

FAMILY

12. Do you have family support? (check one) ☐ Yes ☐ No

13. Would you consider your family support has increased since you started the program at CNTH? (check one) ☐ Yes ☐ No

VSSS-MT

Please choose the answer which is the best description of your experience in using the Cree Nations Treatment Haven methadone program over the LAST MONTH:

1. What is your overall feeling about the effect of the program in helping you deal with your problems?

☐ Terrible
☐ Mostly dissatisfied
☐ Mixed
☐ Mostly satisfied
☐ Excellent

2. What is your overall feeling about, in general, all services you have received?

☐ Terrible
☐ Mostly dissatisfied
☐ Mixed
☐ Mostly satisfied
☐ Excellent

3. What is your overall feeling about the personal manner of the staff?

☐ Terrible
☐ Mostly dissatisfied
☐ Mixed
☐ Mostly satisfied
☐ Excellent

4. What is your overall feeling about the effectiveness of the program in helping you to improve your relationships with your close relatives?

☐ Terrible
☐ Mostly dissatisfied
☐ Mixed
☐ Mostly satisfied
☐ Excellent

5. What is your overall feeling about the effectiveness of services in helping your close relatives know and better understand your problems?

☐ Terrible
☐ Mostly dissatisfied
☐ Mixed
☐ Mostly satisfied
☐ Excellent

6. What is your overall feeling about the knowledge on the part of the nursing staff of your current and past diseases?

☐ Terrible
☐ Mostly dissatisfied
☐ Mixed
☐ Mostly satisfied
☐ Excellent
☐ Not applicable

7. What is your overall feeling about the information you received about the diagnosis and possible evolution of your addiction?

☐ Terrible
☐ Mostly dissatisfied
☐ Mixed
☐ Mostly satisfied
☐ Excellent

8. What is your overall feeling about the effectiveness of the service in helping you establish good relationships with people outside your family (e.g., friends, neighbors, colleagues at work, etc.)?

☐ Terrible
☐ Mostly dissatisfied
☐ Mixed
☐ Mostly satisfied
☐ Excellent

9. What is your overall feeling about the instructions about what to do on your own between appointments (e.g., the clarity, practicality etc. of recommendations)?

☐ Terrible

☐ Mostly dissatisfied

☐ Mixed

☐ Mostly satisfied

☐ Excellent

10. What is your overall feeling about the effectiveness of the service in helping you to improve your self-care (e.g., taking care of your personal hygiene, your diet, your room)?

☐ Terrible

☐ Mostly dissatisfied

☐ Mixed

☐ Mostly satisfied

☐ Excellent

11. What is your overall feeling about the ability of the staff to listen to and understand your problems?

☐ Terrible

☐ Mostly dissatisfied

☐ Mixed

☐ Mostly satisfied

☐ Excellent

☐ Not applicable

12. What is your overall feeling about the help you have received for side effects from medications (if occurred), particularly methadone (e.g. constipation)?

☐ Terrible

☐ Mostly dissatisfied

☐ Mixed

☐ Mostly satisfied

☐ Excellent

☐ Not applicable

13a. In the last month, did you receive help from staff to improve your capacity to cope with your social and working life (e.g. going to public offices, doing housework, getting on with your family and others)?

☐ YES (answer 13b)

☐ NO (answer 13c)

13b. If YES, what is your overall feeling about this/them?

☐ Terrible

☐ Mostly dissatisfied

☐ Mixed

☐ Mostly satisfied

☐ Excellent

☐ Not applicable

13c. If NO, do you think you would have liked to receive this/them?

☐ Yes

☐ No

☐ Don't know

☐ Not applicable

14a. In the last month, did you have the opportunity to take part in leisure activities organized by the methadone program?

☐ YES (answer 14b)

☐ NO (answer 14c)

14b. If YES, what is your overall feeling about this/them?

☐ Terrible

☐ Mostly dissatisfied

☐ Mixed

☐ Mostly satisfied

☐ Excellent

☐ Not applicable

14c. If NO, do you think you would have liked to receive this/them?

☐ Yes

☐ No

☐ Don't know

☐ Not applicable

15a. In the last month, did you take part in the Matrix program?

☐ YES (answer 15b)

☐ NO (answer 15c)

15b. If YES, what is your overall feeling about this?

☐ Terrible

☐ Mostly dissatisfied

☐ Mixed

☐ Mostly satisfied

☐ Excellent

☐ Not applicable

15c. If NO, do you think you would have liked to take part in this?

☐ Yes

☐ No

☐ Don't know

☐ Not applicable

16a. In the last month, did you have practical help at home from the service (e.g., visits from the nursing staff because you were sick, help caring for your children, etc.)?

☐ YES (answer 16b)

☐ NO (answer 16c)

16b. If YES, what is your overall feeling about this/them?

☐ Terrible

☐ Mostly dissatisfied

☐ Mixed

☐ Mostly satisfied

☐ Excellent

☐ Not applicable

16c. If NO, do you think you would have liked to receive this/them?

☐ Yes

☐ No

☐ Don't know

☐ Not applicable

17a. In the last month, did you receive help from the service to join in leisure activities separate from the methadone program (e.g., sports clubs, adult education, etc.)?

☐ YES (answer 17b)

☐ NO (answer 17c)

17b. If YES, what is your overall feeling about this/them?

☐ Terrible

☐ Mostly dissatisfied

☐ Mixed

☐ Mostly satisfied

☐ Excellent

☐ Not applicable

17c. If NO, do you think you would have liked to receive this/them?

☐ Yes

☐ No

☐ Don’t know

☐ Not applicable

TCU ENG

Please indicate how much you agree or disagree with each statement based on the LAST MONTH of treatment.

	Disagree Strongly	*Disagree*	*Uncertain*	*Agree*	*Agree Strongly*
1. You trust your counselor.	○	○	○	○	○
2. Time schedules for counseling sessions at this program are convenient for you.	○	○	○	○	○
3. It's always easy to follow or understand what your counselor is trying to tell you.	○	○	○	○	○
4. This program expects you to learn responsibility and self-discipline.	○	○	○	○	○
5. Your counselor is easy to talk to.	○	○	○	○	○
6. You are willing to talk about your feelings during counseling.	○	○	○	○	○
7. This program is organized and run well.	○	○	○	○	○
8.You are motivated and encouraged by your counselor.	○	○	○	○	○
9. You have made progress with your drug/alcohol problems.	○	○	○	○	○
10. You are satisfied with this program.	○	○	○	○	○
11. You have learned to analyze and plan ways to solve your problems.	○	○	○	○	○
12. You have made progress toward your treatment program goals.	○	○	○	○	○
13. You always attend the counseling sessions scheduled for you.	○	○	○	○	○
14. Your counselor recognizes the progress you make in treatment.	○	○	○	○	○
15. Your counselor is well organized and prepared for each counseling session.	○	○	○	○	○
16. Your counselor is sensitive to your situation and problems.	○	○	○	○	○
17. Your treatment plan has reasonable objectives.	○	○	○	○	○

	Disagree Strongly	*Disagree*	*Uncertain*	*Agree*	*Agree Strongly*
18. Your counselor views your problems and situations realistically.	O	O	O	O	O
19. Other clients at this program care about you and your problems.	O	O	O	O	O
20. You have stopped or greatly reduced your drug use while in this program.	O	O	O	O	O
21. Your counselor helps you develop confidence in yourself.	O	O	O	O	O
22. You always participate actively in your counseling sessions.	O	O	O	O	O
23. You have made progress in understanding your feelings and behavior.	O	O	O	O	O
24. Other clients at this program are helpful to you.	O	O	O	O	O
25. You have improved your relations with other people because of this treatment.	O	O	O	O	O
26. The staff here are efficient at doing their job.	O	O	O	O	O
27. You are similar to (or like) other clients of this program.	O	O	O	O	O
28. You have made progress with your emotional or psychological issues.	O	O	O	O	O
29.Your counselor respects you and your opinions.	O	O	O	O	O
30.You have developed positive trusting friendships while in this program.	O	O	O	O	O
31. You give honest feedback during counseling.	O	O	O	O	O
32. You can depend on your counselor's understanding.	O	O	O	O	O
33. There is a sense of family (or community) in this program.	O	O	O	O	O
34. You can get plenty of personal counseling at this program.	O	O	O	O	O
35. This program location is convenient for you.	O	O	O	O	O
36. You are following your counselor's guidance.	O	O	O	O	O

PGI

Compared to your condition AT ADMISSION to the centre, how much have you changed?

☐ Very much improved

☐ Much improved

☐ Minimally improved

☐ No change

☐ Minimally worse

☐ Much worse

☐ Very much worse

POS

Taking into account your overall experience, what is your impression about methadone as a medication for carrying out maintenance treatment of opioid dependence?

☐ Terrible

☐ Mostly dissatisfied

☐ Mixed

☐ Mostly satisfied

☐ Excellent

PLEASE, WRITE YOUR COMMENTS
(If you need more room, please feel free to write on the back of the page).

From your experience with methadone, what would help you the most now?

....

....

....

....

To date, what has been your experience with the quality of care you have received from Cree Nations Treatment Haven?

....

....

....

....

What do you think new methadone clients need to know about making the transition?

....

....

....

....

What do you think would lead you back to drug use?

....

....

....

....

What has Cree Nations Treatment Haven done to assist you to improve your life?

……

……

……

……

What could Cree Nations Treatment Haven do better?

……

……

……

……

The thing I have liked most about my experience of the methadone program is:

……

……

……

……

The thing I have disliked most about my experience of the methadone program is:

……

……

……

……

This question is to be completed by a CNTH staff member.

CGI

Rate total improvement that, in your clinical judgment, is due entirely to drug treatment.

Compared to his/her condition at baseline, how much has he/she changed?

☐ Very much improved

☐ Much improved

☐ Minimally improved

☐ No change

☐ Minimally worse

☐ Much worse

☐ Very much worse