"Stay the Course…
and Together We Can Secure the Foundation
that Has Been Built"

Supplementary Report: Withdrawal Management

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Submitted to:

The Department of Health and Social Services
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Withdrawal Management Services (WMS)

This supplementary report on Withdrawal Management Services (WMS)/"Detox" and Withdrawal Management (WM) forms part of the larger report titled: **"Stay the Course… and Together We Can Secure the Foundation that Has Been Built ",** an Interim Report on the Mental Health and Addictions Services in the NWT, December 9, 2005.

The main purpose of these supplementary reports is to provide background information, linkages to the mental health and addictions research, and greater explanation of the recommendations within this context. The format of these supplementary reports is such that they can be read on their own. As well, there is overlap of the findings/recommendations with the Interim Report.

However, this supplementary report and others do not provide a complete review of the relevant research on this topic, as time and resources did not permit this review. Nevertheless, the reader can be assured that these supplementary reports provide a good overview of the relevant issues for the ongoing work in the mental health and addictions core service in the NWT.

1. Background Information Withdrawal Management

What is WMS?

Simply put, withdrawal from substances such as alcohol, nicotine, caffeine, and other drugs is the development of a substance-specific maladaptive behavioural change, with physiological and cognitive consequences, that is due to the cessation of, or reduction in, heavy and prolonged substance use. Withdrawal is usually, but not always, associated with substance dependence (APA, 2000).

Conceptually, it is important to understand withdrawal and/or detox within a continuum of addiction related problems, including substance abuse, which can be referred to as the problem drinker, who has negative social consequences of their drinking. Substance dependence, is further along the continuum, and often includes use of substances despite negative consequences, substance tolerance, withdrawal symptoms and compulsive drug seeking behaviours, which can include criminal actions. Additional addiction related problems of note here are substance-intoxication, substance-induced delirium, substance-induced dementia, and substance-induced amnestic, psychotic and others.

There are several terms, often used interchangeably, that refer to withdrawal management and/or detox. Firstly, prior to the introduction of the term withdrawal, the processes and problems associated with persons who stopped using alcohol, nicotine, caffeine, and drugs such as heroin, cocaine, amphetamines, and other drugs was referred to as "DETOX" which has been abbreviated from detoxification.

Detoxification or detox is commonly referred to procedures for the reduction or elimination of toxic substances from the body. Detoxification centres are clinics or settings organized to treat acute withdrawal symptoms from drugs or alcohol.

Withdrawal symptoms are unpleasant reactions experienced when people who have habitually taken addictive substances such as tobacco, alcohol, and illegal drugs, stop taking the substances. For example, when a person who normally smokes 8 cigarettes a day, suddenly, stops, it is likely that they would experience withdrawal symptoms such as anxiety, difficulty concentrating, decreased heart rate, depressed mood, frustration or anger and other withdrawal symptoms for nicotine. Therefore, withdrawal management or detox from substances are interchangeable, and for the most part refer to the same processes, medical treatments and social/support systems used to help people "come off", "come down", or withdraw from the use of the drug. In some cases, Withdrawal Management Services or WMS are strictly for short-term units that provide early intervention and detox to people with addictions (APA, 2000).

In Canada, there is poor congruence as to the usage of the term detox versus withdrawal management. For example, Ontario has recently completed a review of the Withdrawal Management System (Cathexis, 2005). Yet throughout Ontario, centres are called detox programs and centres, and other names.

In Saskatchewan, facilities throughout the province are called Detoxification Services, and in Regina, a service is called: "Regina Detox." In Saskatoon, Detox services are offered through Larson Intervention House. For the remainder of this supplementary report, Withdrawal Management (WM) and WMS will be used, as these are the terms chosen for usage in the NWT at this time, and are less "street talk", and more consistent with a systems and program development approach.

Different Withdrawal for Different Drugs

It is also important to note that there are different physical, mental, psychological and social withdrawal symptoms associated with the different classes of substances and drugs. This is due to the different chemical make-up of each drug and its effects on the body, the different systems used to take in the drug (smoked, drink, sniffed, injected…), and the different social/psychological consequences of withdrawing from a drug (Health Canada, 2000).

A few examples are presented here:

1) Withdrawal from alcohol is often organized in WMS, hospital settings, and community-based "Detox" houses because it is a legal substance. Alcohol's physical depressant effects on the body are very well established and can be either managed through medical withdrawal management protocols, social support protocols and systems, and/or a combination of both.

2) Withdrawal from opioids (heroin, morphine and prescription drugs like codeine) is commonly associated with methadone centres. These centres are usually present in large urban settings such as Vancouver, Edmonton and Toronto. Withdrawal from heavy opioid use can develop within minutes to days following reduction of use. Often opioid addicts, such as heroin addicts, take the drug to avoid withdrawal symptoms.

3) Withdrawal from caffeine, such as regular coffee and cola beverages is more subtle, easily managed by most individuals and requires little medical/social intervention, except where complicated with nicotine, other drugs or medical problems. Many people notice the symptoms of sleepiness, poor concentration and headache when they have missed their morning quota of coffee. These are withdrawal symptoms.

For further information, the reader is directed to the CAMH websites (www.camh.ca) for the withdrawal symptoms of the groups of drugs listed here:

- legal substances (alcohol, nicotine, caffeine)
- uppers/stimulants (cocaine, amphetamines, crystal meth…)
- downers/sedatives (sleeping pills, benzo's…)
- club drugs (ecstasy, GHB, …)
- opioids (heroin, morphine, codeine, fentanyl)
- inhalants (gas sniffing, cleaners, perfumes, after-shave)
- hallucinogens (LSD, magic mushrooms, mescaline, pot)
- Cannabis (pot, hashish)

Why is WMS important?

Withdrawal management is important for a number of reasons in the planning, implementation and ongoing monitoring of the core service of mental health and addictions in the NWT.

Reasons for WMS:

1) Withdrawal management is part of addiction services, in that close to 40% of clients seeking services for addictions will require some form of withdrawal assistance (Cathexus, 2005).

   In the NWT, it is unknown what the numbers are for clients requiring withdrawal assistance, but it has been estimated that it is likely higher than in other Canadian jurisdictions due in part to a binge-type drinking pattern among NWT drinkers (GNWT, 2005).

2) Withdrawal management is a medical/addictions issue that is treatable with appropriate knowledge, skills and linkages in the Health Care system.

3) Withdrawal management is often the first step taken by chronic drug users, or binge-users to address addiction, and therefore is an important step in reaching this population.

4) Appropriate WMS can reduce harm to communities and society by addressing symptoms that if left untreated lead to criminal drug seeking behaviour, violent crime and further drug dependence.

5) Physical harm by substances, including alcohol, drugs and other substances can in the immediate future damage unborn children, youth and children who remain dependent on alcohol or drugs. The immediate response to children/youth, and women of child-bearing age who are substance users and seeking withdrawal support is critical to the prevention of FASD, learning/developmental problems, and future dependence on substances.

2. Abbreviated Literature Review

A full review of the literature on WMS is beyond the scope of this Supplementary Report. What is relevant here is to give background information on WMS from a broad perspective. Specific costing and planning of a centralized WMS at Stanton has been done by the DHSS in 2004, and will be referred to later in this Supplementary Report.

What are evidence-based practices, best practices?

There is "no one size fits all" approach to WMS that is "best practice" across North America. Health Canada has identified approaches for youth and women that are consistent with the scope of WMS. These WMS-like guidelines address the physical health issues of substance problems, and recommend full health assessment at entry to treatment.

For pregnant women, Health Canada reports nation-wide barriers to treatment for women, in that many addictions services, from province to province, cannot handle medical issues such as appropriate detoxification during pregnancy (Health Canada, 2001). This point alone confirms how complex, and difficult addictions can become, and why study, consultation and collaboration is needed to design, implement and integrate WMS in the NWT in 2005.

Another significant point when reviewing the research and practice literature is to be mindful of the distinction and contribution of different approaches to WMS. For the most part, there are two program perspectives in addressing withdrawal management.

First, there are medical approaches to withdrawal management, which are inclusive of health assessment, including a physical work-up, vitals, blood work and other medical tests, prior to determining the best course of treatment. Often, various drugs are used to address physical symptoms of withdrawal, prevent life-threatening events such as respiratory failure and to ameliorate intoxicated physical and psychological states through re-hydration and psychological support. This medical approach to WMS is often part of a continuum of health and social services that is inclusive of assessment services, active treatment and continuing care, and have historically been housed in hospital settings or residential treatment settings (ARF, 2000).

The second approach to WMS, but no less important, is referred to as "social detox" or "home detoxification" or "Community Withdrawal", which is either done with or without medical intervention. Social Detox approaches are often run in community settings, have a strong Alcoholics Anonymous or other Twelve Step focus, and often provide non-medical, psychological and social support, or "Tender Loving Care". Alternatively, social detox programs are not Twelve-Step focused, but are brief in nature, provide a safe housing option and are central to homelessness or chronic mental illness services. An important focus of social detox programs is the provision of shelter, and safety from the harsh elements such as the Canadian winter (ARF, 2000; Cathexis, 2005).

There is no literature to support one approach over the other, and in fact, there is suggestion that an integration of these approaches are needed to address WM, so as to have the best impact for behaviour change, improve the health outcomes of individuals with addictions and to reduce recidivism and fatal outcomes of people withdrawing from substances. A few themes with respect to evidence-based practices are listed here with respect to WMS (Cathexus, 2005).

Medical Support and Assessment/Treatment Protocols

A number of procedures, protocols and treatment procedures make up biopsychosocial assessment and treatment protocols. Early assessment, triage and tailored treatments (medical, psychological and social) are key factors that make up medical/physical support.

There are generally three categories of WMS for alcohol withdrawal, the most common drug pattern seen in the NWT at this time. With this type of medical/physical approach, increasing risk of morbidity and mortality is evident from Level 1 to Level 3 (ARF, 2000; Cathexus, 2005).

<u>Level 1 or mild withdrawal from alcohol where clients may have:</u>

- anxiety, minor tremor, sweating (minor autonomic hyperactivity)
- may or may not have nausea
- increased heart rate (tachycardia) and possibly increased blood pressure
- symptoms appear within 6 to 12 hours after the last drink
- symptoms usually resolve within 48 to 72 hours
- treatment usually consists of re-hydration, pain medication, medications for nausea and stomach discomfort

<u>Level 2 or moderate withdrawal from alcohol where clients likely have:</u>

- anxiety, minor tremor, sweating
- increased heart rate (tachycardia) and possibly increased blood pressure
- seizures are possible, and within 12 and 72 hours after last drink
- dysrhythmias and hallucinosis (auditory and visual)
- symptoms appear within 6 to 12 hours after the last drink
- symptoms usually resolve within 48 to 72 hours

Level 3 or severe withdrawal from alcohol where clients likely have:

- § severe agitation & major tremors
- § marked psychomotor and autonomic hyperactivity
- § global confusion & disorientation, auditory and visual hallucinations
- § symptom cluster is often referred to as DT's or delirium tremens
- § seizures are likely, and within 12 and 72 hours after last drink
- § symptoms appear within 6 to 12 hours after the last drink
- § DT's can appear 5 or 6 days after untreated withdrawal
- § Sudden death can occur, and often due to dysrhythmias and dehydration

It is Level 2 and 3 presentations of withdrawal that are life threatening, in need of medical assessment and treatment in a medical facility. Level 1 symptoms and presentation can progress quickly into level 2, and may require medical intervention (Depetrillo & McDonough, 1999).

It is customary for emergency and medical facilities to have established assessment and screening instruments/checklists to monitor withdrawal symptoms, their progression and to determine appropriate treatment protocols, which includes use of medications (benzodiazepines, anti-seizure medications, others to address cardiac/respiratory complications), electrolytes, vitamins (thiamin in particular to prevent Wernicke's encephalopathy) and others to address serious complications of addiction such as cirrhosis, hepatitis and others.

As can be deduced from the above discussion, there are potentially severe and life-threatening consequences of untreated and complicated withdrawal. Further discussion of drug induced withdrawal, their progression and medical complications is beyond the scope of this document on WMS for the NWT. Nevertheless, the above discussion highlights that withdrawal management is a complex issue, requiring expert medical, nursing, and psychological/social support.

In fact, there is an American association dedicated to the specialty of addiction medicine known as ASAM or American Society for Addiction Medicine, in recognition of this medical specialty that treats among other things, withdrawal from alcohol and other substances.

Team Approach

It is not surprising that a team approach is considered best practice in withdrawal management, given the specialization of many health care professionals in recent years. In established WMS programs in North America, the team will consist of an addictions medicine specialist (physician with addiction medicine specialty), clinical nurse specialist and/or psychiatric nurse, clinical psychologist, social worker, addiction counsellor, recreation therapist, program volunteers, and health care aides.

In other jurisdictions, WMS consist of addiction counselors, volunteers and professional health care staff who are consulted with difficult cases.

What is consistent between all established WMS programs is addiction specific expertise, experience and a passionate and caring approach to dealing with addictions.

Success Rates with WMS

There is established evidence that addiction by definition is a relapsing, chronic condition where there are frequent returns to problem substance use, a return to poor health practices, and ongoing progression of health problems (Leshner, 1998; Health Canada, 2001). Much like other chronic health problems, such as type 2 diabetes and hypertension, living with the problem produces more and more complications, including physical, psychological and social over time.

There is evidence to support the fact that chronic substance users will undergo several withdrawal episodes, or detox periods, prior to successful periods of abstinence. This is the same for residential treatment, and other forms of therapy to address addiction and mental health issues. Not unlike weight loss programs, the designated treatment approaches, including WMS, require frequent trials and failures.

This frequent usage of WMS is a difficult fact for addictions and mental health policy makers and health care providers, who want to treat problems. Unfortunately, addictions are such that the most effective approaches are likely to be successful in 30% of the cases who seek residential or outpatient treatment. Statistics for WM symptoms and health consequences from untreated withdrawal are reported to be almost 99% treatable, if done thoroughly and with appropriate expertise (ARF, 2000). However, the linkage from successful WMS to successful abstinence is not as direct, but much better, when there is good WM.

Other statistics report poor adherence to addiction treatment, either residential or outpatient, when withdrawal has not occurred. This is an important evidence-based practice to consider when delivering residential type treatment services (Cathexus, 2005).

Targeted Programs for different drugs, pregnant women, youth, homeless, etc.

There is ongoing WMS specificity for different populations, such as those with chronic mental health problems in addition to addictions (often referred to as concurrent or dual disorders), street youth, pregnant women, women in general and drug addicted persons.

These targeted WMS are usually available in large urban settings such as Chicago, New York, Vancouver and Toronto.

What is happening elsewhere?

In many jurisdictions across Canada, there is a decentralizing of WMS services to community-based agencies, NGO's and other organizations with mandates to support the poor, homeless, and those with chronic mental health disorders.

Ontario has seen a 10-year pattern of decentralizing WMS to "social detox" programs in the community for alcohol and increased WMS specialization for opioid withdrawal through methadone programs (Cathexis, 2005).

In Alberta, recent actions and priorities are focused on youth detoxification through voluntary means that is youth request detoxification, and subsequent residential treatment services. As well, AADAC, the Alberta Alcohol and Drug Abuse Commission, is reviewing the research on WMS systems and practices. They are developing responses to methamphetamine (crystal meth. is a variation), WMS and the subsequent treatment needs from the usage of this drug (AADAC, 2005).

In other settings, WMS has been tied to emergency shelter needs, and dealing with chronic mental health issues. These services have a long and tried history across Canada in large urban settings, and include Seaton House in Toronto, Old Brewery Mission in Montreal and others in Winnipeg, Regina, Vancouver and most urban cities (Cathexus, 2005).

Residential treatment programs across Canada provide either access to WMS through affiliated health facilities, or provide on-site WMS as part of their residential treatment program. Some residential treatment programs for addictions do not consider WMS at all.

3. Findings from the NWT and WMS

In 2001, WMS was raised as an important issue for the new core service of mental health and addictions to address, given there were gaps in services being provided and more concentration of WMS in larger centres such as Yellowknife.

In 2005, there remain concerns regarding: (1) the place of WMS in the core service of mental health and addictions, (2) the access to service across the territory, and (3) the leadership to integrate WMS within the ISDM of health and social services in the NWT.

Areas of Success/Strength

- Draft Withdrawal Management Unit at Stanton

  The GNWT responded to NWT wide concerns about establishing a designated, hospital based Withdrawal Management Unit to be located at Stanton in Yellowknife. Costing, bed numbers and related human resource planning was done. This plan was halted in 2005 due to inadequate buy-in and consultation with medical/nursing personnel and possibly "elitism" in not wanting WMS in a hospital setting. Historically, WMS was provided in a community-based setting in Yellowknife.

§ WMS in the NWT

  There are a variety of withdrawal management services across the NWT, with more concentration in Yellowknife through the Salvation Army Program and access to 24 hour emergency at Stanton Hospital. Hay River reports a protocol that is used for WMS, which is inclusive of community counselling support.

§ Community Counselling Program

  Historically, community addictions workers, mental health specialists (1990's), and others have assisted at the community level to form informal supportive systems for dealing with chronic addictions clients who require medical/social withdrawal management.

  These informal withdrawal management approaches date back to the start of Alcohol Societies, from a group of people getting sober and then helping others, and to new interagency support systems.

Areas for Further Strengthening and Development

- Further Work to Integrate WMS into PCCT and ISDM

  There is some element of passive resistance in addressing withdrawal management across the NWT, in that it remains unclear as to the effectiveness of hospital based services that provide withdrawal management services.

  In community settings, health centres may or may not provide medical/nursing assessment for clients presenting with withdrawal symptom patterns. Many are turned away to "dry out" on their own. There are missed opportunities with these clients who present for medical assessment and attention due to their addiction to engage them in therapeutic processes that could help lead them to improved health.

- Expertise is lacking in WMS across the NWT

  WMS requires use of multidisciplinary teamwork, clinical expertise from medicine and nursing, good collaboration with community based services, and efficient use of NWT resources to provide the best possible services within the limitations of community-based health centres, temporary locum medical staff, community- based counselling personnel and volunteers/community members who are willing to help or not help.

  There is also a crisis nature to WMS, in that centralized resources will not be able to be accessed in time, given the short time-frames for symptom assessment and management, and the possible life threatening implications.

4. Discussion & Recommendations

WMS services were discussed throughout the NWT during the review for this report. The main concerns raised were due to inconsistent services, concerns about emerging drug usage patterns, limited expertise in remote areas to implement WMS protocols, and an overall uncertainty about where WMS fits in the new core service of mental health and addictions. Also, a few interviewees noted cases of inadequate medical support being provided for people withdrawing from substances in communities resulting in their hospitalization.

WMS is generally part of addiction and mental health service continuum. Also, WMS is closely linked to all addiction services, including community counselling, residential treatment, housing, shelters, income support systems and

policing/justice/corrections services. However, medical WMS would be more appropriate under Diagnostic and Curative Services, as it could have improved connection to medical and nursing advisory personnel. This cross-over of the core service of mental health and addictions among many of the ISDM core services is good in terms of integration, but a challenge in getting the appropriate expertise involved for policy, financial planning, and training of health care providers.

The provision of WMS is highly dependent on the capacity and approach of the entire core service of mental health and addictions in the NWT, and also medical and nursing expertise to deal with complicated withdrawal and its health consequences. There are no easy solutions to WMS in the NWT due to the remoteness of many communities, the distance for people to travel to access medical support, the limited number of medical staff with addictions expertise, and the willingness to integrate WMS with other health care issues. Social WMS is somewhat easier at first glance, as no medical facilities are required, fewer financial resources are needed and these services can be of an outreach nature. However, the linkage between social and medical WMS is a fine line, and complete disconnection of one from the other is no solution in the NWT.

A few key points regarding WMS in the NWT and the future study that is needed in this area, are summarized here:

1) Injury/Suicide Statistics Reveal the Need for WMS in the NWT

A review of NWT Coroners' Reports for the years 1999 to 2001 found that alcohol was a contributing factor in 44% of all unintentional injury deaths and 39% of all suicides investigated (GNWT, 2004). Also, heavy drinking, a pattern that puts people at risk of injury, was more prevalent among males and among residents of smaller communities (GNWT, 2005).

Therefore, WMS, as part of the mental health and addiction continuum of services, is extremely relevant in the NWT, as it can be the first step in addiction intervention.

2) Pattern of Substance Use in the NWT

From recent drug surveys and NWT statistics, there is a pattern of binge-drinking and heavy drinking, which puts people at greater risk of injury among residents in smaller communities across the NWT (GNWT, 2005).

The nature of these drinking patterns suggests WMS in some form is needed in small communities. Reliance on central WMS in Yellowknife will not reach most of the NWT population in need.

Also, there have been instances of individuals being "sent home" to withdraw, only to end up in a regional hospital with life threatening complications of withdrawal, just a few hours later.

3) Emerging concerns about drug use, patterns, hard core drugs

There are future implications for increasing complexity of withdrawal as NWT communities are exposed to more hard-core drugs such as cocaine, crystal meth, and higher quality cannabis/pot, as well as other drugs.

Further usage, dependence/abuse of these drugs will require greater expertise from WMS. Many of these specialty services are only available in larger centres such as Vancouver or Edmonton, due to their urban-focused approach to WMS and other addiction services. WMS services for hard-core drugs that are urban-focused may not fit with NWT, rural and remote communities. There is a need to balance the economics and availability of expertise, with use of out-of-territory resources with respect to WMS and addiction support for those clients with hard-core drug problems, poly-drug problems and complicated medical consequences from these substances.

4) Moral Judgment of Withdrawal and Addiction

There remains much bias, stigma and "elitism" with respect to treating persons with addictions in the NWT. This pattern of health discrimination towards people with addictions is pervasive, throughout the health care system in the NWT and remains a major barrier to the professional and ethical treatment of these disorders. There is no parallel of this moral judgment with other lifestyle illnesses, such as lung cancer or type 2 diabetes, which are often, chronic and progressive disorders.

This is a pervasive problem in many health care circles that requires ongoing education, discussion and exploration with PCCT members, policy makers, management personnel, and leaders.

5) Need Interdisciplinary Team

The above literature review had one major purpose from the authors' perspective, and that was to demonstrate the complexity of WMS and the need for an interdisciplinary team of people from various professions, communities, agencies and consumers to guide ongoing and future policy and program design and development regarding WMS. This team needs to include input from medical, nursing, facility planners, psychologists, psychiatrists, mental health counselors, wellness workers, clinical supervisors, residential treatment personnel, and NGO's involved with WMS as a minimum for all future planning work.

6) Current WMS services (formal services) are provided in Yellowknife and Hay River. Inconsistent services remain throughout the northern part of the NWT and other areas.

As the Mackenzie Gas Project (MPG) continues to progress through its last stages of approval and regulatory review, there is a critical need to address WMS within the affected areas, and in particular in the Beaufort Delta and Sahtu regions. It is these areas, where interviewees raised concerns about the adequacy of medical/nursing support for withdrawal from alcohol and drugs.

7) Less clear what scope of WMS & resources needed in the NWT

Currently, WMS are provided across the NWT through Stanton, Salvation Army, Hay River and less formally in other areas in the NWT.

Need to address high-risk groups such as pregnant women, youth and those with concurrent disorders.

Much study, facilitation with medical/nursing groups, mental health and addictions personnel, and those providing services to at-risk groups (Salvation Army) is needed to integrate and educate all stakeholders of Withdrawal Management and its place in the core health and social services of the NWT.

What do the people say?

"Put a group of us, medical folks and others, in a room for half a day, and we will have the solutions for you when it comes to medical detox."

Next Steps/Further Recommendations:

Further study and consultation is needed with respect to WMS, and with all groups of health care providers and community workers in the NWT, to reflect community needs, best practices and availability of resources within local, regional and territorial health and social services facilities.

(Suggested timeline: ongoing)

Consider developing an addiction medicine advisory group/committee with possible assistance from out-of-territory specialists in addiction medicine, that can contribute to the distinct medical processes involved in mental health and addiction services. This group would be a critical part of any Withdrawal Management System (WMS) that involved hospital services.

(Suggested timeline: in the next 1 to 2 years)

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