## **Canadian Research Initiative on Substance Misuse Prairie Node Progress Report and Next Steps**

December 2015









#### **Background**

#### **National context**

Addiction research in Canada suffers from geographic isolation of research groups as well as limited communication between service providers and academic research This has hindered intervention research and translation and incorporation of evidence into prevention and treatment To address these gaps, the programs. Canadian Institutes of Health Research (CIHR), through its Institute for Neurosciences, Mental Health, and Addiction (INMHA), has developed the Canadian Research Initiative in Substance Misuse (CRISM).

CRISM is a 5-year initiative and was modeled, in part on the US National Institute on Drug Abuse's Clinical Trials Network. CRISM was designed to facilitate communication and collaboration among addiction service providers, researchers, and policy-makers. In September 2015, four regional CRISM Nodes, one each located in BC, the Prairies, Ontario, and the Quebec/Atlantic regions, began operations. The overall objectives of the CRISM network are:

- To identify and/or develop the most appropriate clinical and communityprevention based or treatment interventions for substance misuse (SM);
- To provide evidence to support the enhancement of prevention treatment services regarding SM to

- decision makers and service providers; and
- To support improvement in quality of care and quality of life for Canadians living with SM.

#### **Regional context**

In order to address these objectives, we have formed a Prairie CRISM Node to link together individuals in Alberta. Saskatchewan and Manitoba who are interested in working toward accomplishing these goals. Alberta, Saskatchewan, and Manitoba have excellent researchers investigating SM interventions delivered in the clinic, the community, and in academic research settings. Each Province funds treatment and prevention of SM and has developed strategic plans through their respective Ministries of Health and Regional Health Authorities. But to date, these assets have operated either in isolation, or as part of small provincial teams. This is a missed opportunity for regional collaboration and participation in national SM initiatives.

Based on the results of the Member Survey, ad hoc discussions with Members, and also in consideration of National CRISM activities and priorities, we have identified a number of immediate priorities that are detailed in the Progress and Next Steps section, following.

### **Progress and Next Steps** Timeline: through September, 2016

The CRISM Prairie Node started operations in September, 2015. Initial activities for start-up included recruitment of our Node manager (Dr. Denise Adams) and the physical set up of our main office at the University of Alberta in Edmonton. Additional Node activities include the following:

- 1. Develop Node infrastructure. The goal of this activity is to maximize Node functioning and Member engagement. There are 4 components of this activity:
- (a) Website development. Our website is under development and we anticipate having a basic web presence in early January 2016. Additional sections of the website will be added throughout 2016. Conceptually, the website will be designed to have a public access component and a member-only component. There are several website resources that we will develop based on feedback received from Members, including:
- Access to regional and National CRISM information and opportunities
- Access to registries of Members and affiliated programs
- (b) Staffing. Now that the National study protocol has been approved we will move ahead with detailed planning, including hiring additional staff such as research nurses and research assistants. In addition, we interviewed 10 potential summer students and have hired 2 for May-Aug 2016. These students will be based in the Edmonton office.
- (c) Regional engagement. To assist in planning Prairie Node activities, we created an online survey and invited interested people to complete it. The survey responses are detailed in the Prairie Node Member Survey Results report. A key focus for the Node is to continue to build membership in all 3 of our provinces and to specifically target Manitoba for engagement activities. A working group for this activity will be established early in 2016. We are in the process of interviewing for staff to move this priority forward.
- (d) Project funding. Regionally, we have established a funding stream to support new research and knowledge exchange projects among Node members. To date, we have received three applications and have approved two; one is currently under review. Approved applications are:
  - Bonnie Lee (University of Lethbridge): Gambling Disorder vs Alcohol Use Disorder: Comparing Treatment Outcomes with Congruence Couple Therapy. Node funding will be used to add items on illicit drug use to a funded randomized clinical trial and to support regional training for ~25 service providers on congruence couples therapy.
  - Darlene Chalmers (University of Regina): Social Work Practice & Human-Animal Interaction Survey: Meeting. Node funding will be used to support a regional meeting of practitioners and researchers interested in animal-assisted interventions in addiction treatment.

- 2. Develop Node interest groups. The goal of this activity is to facilitate the development of well-functioning Node subgroups to move specific activities and projects forward and to maximally engage with Member expertise. Subgroups will be developed using the survey results and will include groupings by geographic region, interest in specific populations, addiction types, interventions, etc.; and by specific CRISM Node and national research projects. Communication to those who have expressed interest in specific subgroups will be carried out by email in January 2016. Working groups will initially meet via telephone and then in person, as is feasible.
- 3. Convene a Node meeting in Spring, 2016. The goal is to hold the first in-person Prairie Node meeting and engage with members face-to-face. Most (n=46, 92%) members expressed interest in participating in face-to-face meetings. Agenda items for the first Node meeting will include:
- Project-specific meetings for the national project (comparing models of treatment for prescription opioid misuse) and each of the proposed demonstration projects (enhancing retention in treatment using contingency management and motivational interviewing; screening and brief intervention)
- Networking with Node members around specific interests
- Brainstorming on ways to leverage CRISM investments
- Information sessions and workshops (we will follow up with members for input around specific session or workshop topics)

We will solicit feedback on timing of this meeting in the New Year.

- 4. Node project development and conduct (see Appendix for study descriptions). The goal is to engage project sub-groups in study development and maximize readiness for project roll-out.
- (a) National CRISM study. OPTIMA: Optimizing patient centered-care: a pragmatic randomized control trial comparing models of care in the management of prescription opioid misuse. The Prairie Node has collaborated with the other three CRISM Nodes to submit a pragmatic trial on treatment options for prescription opioid misuse to the Canadian Institutes of Health Research. This proposal was approved by CIHR and peer-reviewed feedback has been returned. CRISM Nodes are currently working to integrate the feedback and update the protocol. To date, Edmonton and Calgary regional sites for this trial have been confirmed. We would like to identify a third regional site outside Alberta.

Table 5. Node Members expressing interest in OPTIMA

Member	Location	
Barry Andres	Edmonton	
Allan Aubry		
Avininder Aulakh	Edmonton	
	(Site Coordinator)	
Darren Christensen	Lethbridge	
Michelle Craig	Edmonton	
Nady el-Guebaly	Calgary	

Charl Els	Edmonton	
Carolyn Gaspar	Saskatoon	
Trish Hanson	Edmonton	
Elaine Hyshka	Edmonton	
Diane Kunyk	Edmonton	
Ronald Lim	Calgary	
	(Site Coordinator)	
Marnie MacKay	Edmonton	
Gerlinde Metz	Lethbridge	
Stacey Petersen	Calgary	
Capri Rasmussen	Calgary	
Caroline Tait	Saskatoon	
Michael Trew	Calgary	
Kim Turgeon	Calgary	
Glenn Walmsley	Edmonton	
Cora Weber-Pillwax	Edmonton	

Members who have expressed interest in this project will be contacted in January 2016. Working groups will initially meet via telephone and then in person, as is feasible.

### (b) Regional Demonstration Project 1: Motivating client engagement in substance misuse (SM) treatment

Table 6. Node Members expressing interest in demonstration project 1

Member	Location	
Carol Adair	Calgary	
Noreen Agrey	Saskatoon	
Darren Christensen	Lethbridge	
Andrew Greenshaw	Edmonton	
Elaine Hyshka	Edmonton	
Ronald Lim	Calgary	
Rohit Lodhi	Edmonton	
Gabriela Novotna	Regina	
Marcella Ogenchuk	Saskatoon	
Stacey Petersen	Calgary	
Capri Rasmussen	Calgary	
Kay Rittenbach	Edmonton	
Jonathan Stea	Calgary	
Caroline Tait	Saskatoon	
Kim Turgeon	Calgary	
Glenn Walmsley	Edmonton	

Members who have expressed interest in this project will be contacted in January 2016. Working groups will initially meet via telephone and then in person, as is feasible.

(c) Regional demonstration project 2: Building capacity for community-based SM web screening and brief interventions

Table 7. Node Members expressing interest in demonstration project 2

Member	Location
Carol Adair	Calgary
Kathy Aitchison	Edmonton
Noreen Agrey	Saskatoon
Michelle Craig	Edmonton
Andy Field	Saskatoon
Carolyn Gaspar	Saskatoon
Thomas Mountain	Lethbridge
David Mykota	Saskatoon
Arto Ohinmaa	Edmonton
Marcella Ogenchuk	Saskatoon
Amy Porath-Waller	Ottawa
Kay Rittenbach	Edmonton
Caroline Tait	Saskatoon

Members who have expressed interest in this project will be contacted in January 2016. Working groups will initially meet via telephone and then in person, as is feasible.

#### 5. Prairie Node Governance

In accordance with CIHR regulations, the Prairie Node has developed levels of governance and accountability. These include the CIHR Investigator Group, the Regional Coordinating Committee (RCC) and the Regional Advisory Panel (RAP).

The investigator group is composed of Cam Wild [Principal Investigator]), David Hodgins [Principal Investigator], Colleen Dell [Principal Investigator], Stacey Petersen [Principal Consumer Representative], and Allan Aubry [Principal Knowledge User]. This group is responsible for working with and communicating with CIHR. The first meeting of this group and CIHR was held May 29, 2015 in Toronto.

The RCC is tasked with setting strategic direction (with respect to research priorities and opportunities for collaboration across the CRISM network), resource allocation and staffing for the Prairie Node, and will provide strategic oversight of initiatives to secure complementary funding. The RCC will include the 3 PIs (Wild, Hodgins, Dell), the Principle Knowledge User and the Principal Consumer Advocate.

The RAP serves to facilitate information exchange between strategic decision-making in each Province and strategic planning for Node activities and inform decisions made by the RCC. The RAP includes senior executives occupying key strategic positions within Prairie substance misuse service systems along with a representative from the Nechi Institute and is overseen by the CIHR Investigator Group.

The first joint meeting of the RCC and RAP took place by phone Sept 11, 2015. Minutes from that meeting have been circulated to the Node members and are available upon request. Future meetings will be held as outlined in the Terms of Reference documents, two (RAP) and three (RCC) times per year.

If you have any questions or concerns about this report please contact Denise Adams at denise.adams@ualberta.ca

#### **Appendix Project Descriptions**<sup>1</sup>

National CRISM Project: OPTIMA: Optimizing patient centered-care: a pragmatic randomized control trial comparing models of care in the management of prescription opioid misuse.

Prevention and treatment of opioid use disorder (OUD) in Canada has become an urgent public health priority. There are a number of evidence-based options available for the treatment of OUD, but only two opioid agonist medications are currently approved in Canada for opioid agonist therapy (OAT): methadone and buprenorphine. Methadone has emerged as standard of care, while in other jurisdictions, including the United States, buprenorphine/naloxone is the pharmacotherapy of choice for treatment of OUD. Unfortunately, adherence to long-term maintenance treatment, either with methadone or buprenorphine/naloxone, is associated with several challenges that undermine the population impact of these treatments. For instance, because of its low therapeutic index, strict programmatic regulations (e.g., daily witnessed consumption) govern initiation of methadone administration in most jurisdictions, and these requirements have a negative impact on motivation among opioid-dependent individuals to participate in methadone maintenance treatment. In contrast, while the improved safety profile of buprenorphine/naloxone with respect to overdose can permit flexible take-home dosing, studies have also demonstrated significant barriers to uptake, also stemming from patient unwillingness to engage with long-term maintenance therapy. Often, this unwillingness reflects patient preferences to progressively taper off opioids rather than participate in longterm maintenance treatment with opioid agonists.

A number of problems will be addressed in the proposed study; all are aimed at providing evidence to optimize care for individuals who have become addicted to opioids and are actively using prescription opioids. First, research to date on the relative efficacy of buprenorphine/naloxone versus methadone has limited external validity regarding the care of prescription opioid (PO) users. To our knowledge, no previous randomized trials have examined the relative benefits of buprenorphine/naloxone and methadone when offered within a realistic model of care, adapted to the respective safety profiles of these medications and in line with current clinical practice guidelines. Thus, questions remain as to how these medications perform among PO-dependent individuals in realistic treatment scenarios.

Second, uptake of OAT continues to be problematic in the target population. Among the key barriers is that patients often express a preference for short term opioid tapering over longterm maintenance therapy, and can experience barriers to accessing addiction care when programs exclusively offer maintenance therapy. Novel strategies are required to engage and retain individuals in treatment, particularly among those who are reluctant to participate in long-term agonist therapy programs. Clinical trials to date have not accommodated participant preferences, flexibility or transitions between tapered or maintenance agonist therapy. In this context, it is important to determine whether programs that are explicitly designed to support ongoing shared patient-provider decision making processes can potentially increase

<sup>&</sup>lt;sup>1</sup> The projects described in this document are designed to kick-start Node research. Support for Members is available within the Prairie Node to develop new initiatives. For more information, contact Dr. Denise Adams, CRISM Prairie Node Manager (denise.adams@ualberta.ca)

engagement in long-term agonist treatment or rates of successful taper, and subsequently, improve overall health outcomes. These issues will be addressed in a 6-month, open-label, multi-site pragmatic randomized trial involving over 200 clients recruited from all 4 CRISM Nodes.

## **Regional Demonstration Project 1:** <u>Motivating client engagement in Substance Misuse (SM)</u> treatment

Researchers and service providers recognize that drop-out is perhaps the most common outcome of specialty substance misuse (SM) treatment - regardless of type of intervention The most innovative evidence-based pharmacotherapies or offered or service context. psychosocial treatment interventions stand little chance of reducing the individual and population burden of SM unless new approaches to address client engagement and retention in treatment are developed. Interventions targeting motivational processes are promising, and important strategies include implementing protocols that characterize the client case mix in relation to initial treatment motivations and incorporating motivational enhancement and contingency management interventions into treatment programs to increase adherence, retention, and client engagement. A thematic focus on motivation is supported by consistent evidence that treatment motivation predicts initial client engagement in SM programs and that client retention, in turn, is a robust predictor of positive post-treatment outcomes. Evidence for the efficacy of using motivational interviewing (MI) interventions and contingency management (CM) protocols for increasing participation and quality of client outcomes is also well established. MI interventions have been widely disseminated, in part because individual practitioners can integrate the techniques into routine clinical activities. However, there is continuing concern about whether MI is effectively implemented by practitioners after training workshop. CM has been less widely adopted because it requires structural program changes and considerable resources to provide motivational incentives. It also requires broadening of treatment models to acknowledge the impact of external reinforcers in addition to the intrinsic motivation that clients bring to treatment, a shift that some treatment personnel, in some situations, resist. Because of these issues, the potential benefit of MI and CM interventions for promoting client retention in treatment is unrealized and only sporadic attempts have been made to adapt these interventions to the Canadian treatment context.

This project will adapt two evidence-based interventions to the Canadian treatment context to enable more widespread adoption with high levels of fidelity. Three development sites will be chosen from across the Prairie region, i.e., treatment agencies or programs that want to address issues of motivation and retention within their settings. Sites will be chosen to reflect diversity in geography, special populations (e.g., women, youth) and/or treatment focus (e.g., outpatient substance abuse, opioid replacement clinic). In Phase 1 (2015-2016), we will work with program personnel from each setting to explore how MI and CM techniques and principles could be adapted for implementation into existing programming. Published training materials (e.g., NIDA Blending Team Products) will be further developed, adapted, and piloted to develop user-friendly protocols, and training and resource needs will be determined. In Phase 2 (2017-2018), we will conduct an open label prospective trial of the adapted protocols with new program admissions. A separate trial will be conducted with each treatment site,

allowing for staggered start times, and participant accrual over a 6 month period. Participating programs will be provided with support from Prairie Node research nurses/clinical liaisons, tablets to facilitate efficient data collection, as well as a CM reinforcement budget. Results will be used to further refine the training, supervision, and treatment models as well as refinement of training materials.

# **Regional Demonstration Project 2:** <u>Building capacity for community-based SM screening and brief interventions.</u>

Researchers and service providers recognize that only a small proportion of substance misusers are ever diagnosed or receive specialty SM treatment. Many people exhibiting moderate-to-low problem severity prefer, and can benefit from, exposure to low-intensity brief and self-directed interventions. Alberta-based randomized trials demonstrate the efficacy of this type of intervention among adults, but the approach has been challenging to scale up for population impact.

This project will develop an online screening, self-management, and referral to treatment (SSMRT) resource for SM among youth. Recent reviews concluded that application of SSMRT interventions to youth is promising, but that the evidence base is weak and that additional research is needed to examine the impact of interventions that link SM screening with tailored and brief, internet-based interventions. A thematic focus on SSMRT is appropriate for our region as it represents an opportunity to reduce unmet need for care, particularly in remote regions, by using online technologies. In Phase 1 (2015-2016), we will undertake a systematic review of brief SM prevention resources that would be suitable for use in a self-directed online format. In Phase 2 (2016-2017), we will collect initial data from youth using validated screening tools for SM, and will assess interest in, and preferences for accessing, different types of resources for SM, including information, self-management, and brief interventions. These results will be used in Phase 3 (2017 – 2019), which will finalize and test an integrated screening + self-management + referral to treatment online resource.