

Appendix A

Evaluation Partners and Interested Parties Engaged

The Changemark R + E evaluation team identified evaluation partners and interested parties to engage in the development and implementation of the evaluation and subsequent knowledge translation efforts of the findings. Wherever possible, the existing MMHA nurse prescribing governance structure was used to reach evaluation partners and interested parties. This structure included the Evaluation Oversight Committee, Steering Committee, Implementation Committee, Evaluation Sub-committee, as well as the RN/RPN Prescribing Community of Practice. The Community of Practice was comprised of active RN and RPN OAT prescribers and others involved in implementation. The RN/RPN Prescribing Evaluation Oversight Committee, Steering Committee, Implementation Committee and Evaluation Sub-committee membership includes representation from the following organizations:

- Ministry of Health (HLTH), including the Office of the Provincial Health Officer, Nursing Policy Secretariat and Professional Regulation
- Ministry of Mental Health & Addictions (MMHA)
- British Columbia Centre for Disease Control (BCCDC)
- British Columbia College of Nurses and Midwives (BCCNM)
- British Columbia Centre on Substance Use (BCCSU)
- British Columbia Nurses' Union (BCNU)
- Fraser Health Authority (FHA)
- First Nations Health Authority (FNHA)
- Interior Health Authority (IHA)
- Kílala Lelum Health and Wellness Cooperative
- Nurses and Nurse Practitioners of British Columbia (NNPBC)
- Northern Health Authority (NHA)
- Provincial Health Services Authority (PHSA)
- Vancouver Coastal Health Authority (VCH)
- Vancouver Island Health Authority (VIHA)

Appendix B

Evaluation Framework

RE-AIM	Evaluation Aims	Evaluation Questions	Indicators	Data Source/ Collection Measures
Reach	<i>#1 Understand the implementation and reach of the RN and RPN Prescribing of OAT Initiative to date</i>	<p>How many individuals have received a prescription from a nurse OAT prescriber over time?</p> <p>What is the number of pharmacies dispensing nurse prescriptions of OAT over time?</p>	<p># individuals who have received prescriptions by nurse prescribers, by geographic location, prescriber type, Health Authority, OAT drug type</p> <p># pharmacies dispensing nurse prescriptions, by geographic location, prescriber type, OAT drug type</p>	OAT Prescription Monitoring from Health Sector Information, Analysis and Reporting (HSIAR)
Effectiveness	<p><i>#2 Determine the effectiveness of RN and RPN Prescribing of OAT Initiative, including related to:</i></p> <p><i>a. Expanding equitable access to low-barrier substance use care, including medications for opioid use disorder and social services</i></p> <p><i>d. Providing person-centered and culturally safe care</i></p> <p><i>#4 Increase understanding of the experiences of RN and RPN OAT prescribers, care team members working alongside RN and RPN OAT prescribers and the experiences of people who have received care from RN and RPN OAT prescribers.</i></p>	<p>What has the experience of accessing OAT through nurse prescribers been for people who use drugs?</p> <p>What are the benefits and challenges (positives and negatives) to accessing and receiving care from a nurse prescriber?</p> <p>Do certain groups experience different levels of positives or negatives in accessing nurse prescribing?</p>	<p>Account of receiving care from a nurse OAT prescriber, including but not limited to process, timeliness, additional referrals/ services offered</p> <p>Perceptions of individuals who have received substance use care from nurse OAT prescribers (including whether care received was person-centered, trauma-informed, and culturally safe)</p> <p>Perceptions of nurse prescribing of OAT from individuals receiving care, including benefits and challenges, and in the context of any previous experiences attempting to receive OUD care</p> <p>Level of satisfaction with care received</p> <p>Likelihood of returning to nurse OAT prescriber for future substance use health care needs</p>	<p>Interviews with individuals who have received care from a nurse OAT prescriber</p> <p>Standardized instruments (e.g., Client Satisfaction Questionnaires (CSQ-8)¹</p> <p>Questions from the First Nations Regional Health Survey</p> <p>Topics from validated health system performance measures survey tools² (e.g., the Ontario Perception of Care Tool for Mental Health and Addictions)</p> <p>Feedback from PWLLE, Indigenous partners, and partners regarding important indicators of program success</p>

¹Attkisson CC, Zwick R. The client satisfaction questionnaire. Psychometric properties and correlations with service utilization and psychotherapy outcome. *Eval Program Plann.* 1982;5(3):233-237. doi:10.1016/0149-7189(82)90074-x

² Kamran, Hasham & Piske, Micah & Min, Jeong & Pearce, Lindsay & Zhou, Haoxuan & Homayra, Fahmida & Wang, Linwei & Small, Will & Nosyk, Bohdan. (2022). Validation and endorsement of health system performance measures for opioid use disorder in British Columbia, Canada: A Delphi panel study. *Drug and Alcohol Dependence Reports.* 5. 100095. 10.1016/j.dadr.2022.100095.

RE-AIM	Evaluation Aims	Evaluation Questions	Indicators	Data Source/ Collection Measures
Adoption	<i>#1 Understand the implementation and reach of the RN and RPN Prescribing of OAT Initiative to date</i>	<p>What is the total number of nurse OAT prescribers and how many of them are actively prescribing over time?</p> <p>What are the characteristics of nurse OAT prescribers?</p> <p>What does current nurse OAT prescribing practice look like? (also addressed under 'implementation' domain below)</p>	<p>#/% nurses who have received training, by type of nurse, by training for type of OAT</p> <p>Of those enrolled, number actively prescribing, by Health Authority, by geographic location, by prescriber type, by OAT drug type</p> <p>#/% nurse OAT prescribers by regional health authority</p> <p>#/% nurse OAT prescribers by community type (rural, remote, urban, suburban)</p> <p>#/% nurse OAT prescribers by health service delivery setting</p>	<p>BCCSU Evaluation of RN/RPN education and preceptorships (e.g., 3-month and 12-month post course follow-up survey, preceptorship survey)</p> <p>OAT Prescription Monitoring from Health Sector Information, Analysis and Reporting (HSIAR)</p> <p>Health Authority Tracking Data (where available)</p>
Implementation	<p><i>#3 Identify barriers and facilitators to RNs and RPNs prescribing of OAT</i></p> <p><i>#4 Increase understanding of the experiences of RN and RPN OAT prescribers, care team members working alongside RN and RPN OAT prescribers and the experiences of people who have received care from RN and RPN OAT prescribers.</i></p>	<p>What does current nurse prescribing of OAT practice look like?</p> <p>What have the facilitators and barriers been to implementing nurse prescribing?</p>	<p>Facilitators and barriers to implementation</p> <p>Challenges, successes and opportunities for improvement in RN and RPN Prescribing of OAT implementation and maintenance</p> <p>Perceptions of team members in the role of nurse prescribing of OAT to enhance workforce capacity building to improve access to substance use disorder care, by setting</p> <p>Benefits of nurse prescribing of OAT embedded in programming</p> <p>Unexpected impacts of nurse prescribing of OAT and implications for their own work</p>	<p>Health Authority MHSU Program Monitoring Templates and other tracking (where available)</p> <p>Other Health Authority Data, as available (e.g., surveys, qualitative analyses, studies, or case reviews led by Regional Health Authorities, First Nations Health Authority, Provincial Health Services Authority)</p> <p>Memos and notes taken during meetings with implementation partners (i.e., BCCNM, Regional Health Authorities, FNHA, PHSA, etc.)</p> <p>Surveying of health care and other service providers working within a setting where nurse OAT prescribers practice (diverse sample by discipline and clinical setting)</p>

RE-AIM	Evaluation Aims	Evaluation Questions	Indicators	Data Source/ Collection Measures
Maintenance	<p><i>#4 Increase understanding of the experiences of RN/RPN prescribers</i></p> <p><i>#2 Determine the effectiveness of RN/RPN prescribing initiative, including related to:</i></p> <p><i>a. Expanding equitable access to low-barrier substance use care, including medications for opioid use disorder and social services</i></p> <p><i>b. Increasing health human resources for people who use drugs</i></p> <p><i>c. Increasing health system capacity for timely substance use disorder treatment interventions</i></p>	<p>What has the experience of prescribing OAT been for nurse OAT prescribers?</p> <p>What adaptations might be needed to promote increased adoption and integration?</p>	<p>Perceptions of RN and RPN OAT prescribers of incorporating prescribing OAT into their practice</p> <p>Challenges, successes and opportunities for improvement in RN and RPN Prescribing of OAT implementation and maintenance</p> <p>Perceptions of RN and RPN OAT prescribers in facilitating connections to available resources and supports or referring to other health care providers when individualized needs extend beyond qualified scope</p> <p>Experiences of RN and RPN OAT prescribers in accessing practice supports and receiving guidance (i.e., experiences using the 24/7 line and working with prescribers and other health care providers)</p> <p>Level of preparedness, any outstanding issues in prescribing or wrap-around substance use disorder care provision and suggestions for mitigation/ improvement</p>	<p>Semi-structured qualitative interviews with a diverse and representative sample (by type of nurse, setting, service user population, geographic location)</p> <p>Demographic information about nurse OAT prescribers interviewed</p> <p>Other Health Authority Data, as available (e.g., surveys, qualitative analyses, studies, or case reviews led by Regional Health Authorities, First Nations Health Authority, Provincial Health Services Authority)</p>

Appendix C

Provincial Registered Nurse (RN)/Registered Psychiatric Nurse (RPN) OAT Prescribing Initiative Evaluation Overview

Background

In September 2020, the Provincial Health Officer issued an Order to permit registered nurses (RNs) and registered psychiatric nurses (RPNs) in British Columbia who meet specific criteria and have received required training, to prescribe controlled drugs and substances to people at risk of an overdose due to illicit drug use (henceforth, 'OAT nurse prescribing').

Evaluation Overview

Changemark Research + Evaluation ("Changemark") has been commissioned by B.C.'s Ministry of Mental Health and Addictions to conduct an evaluation of this initiative.

Nurse prescribing of OAT is a relatively new practice. Our team is interested in exploring and understanding the roll-out and impact of program activities, including outputs and select short- and medium-term outcomes from the perspectives of nurse prescribers, people who have accessed OAT prescriptions through a nurse prescriber, and those working alongside nurse prescribers in various settings. We anticipate the findings will help all partners better understand program functioning, what is working well and what could be improved for future planning.

Methods

Given that experiences of OAT nurse prescribing are varied, we are taking a qualitative approach to understand several different types of individuals who have been impacted by this initiative. This includes: 1) OAT nurse prescribers (i.e., RNs/RPNs); 2) individuals who have received care from OAT nurse prescribers; and 3) care team members working alongside OAT nurse prescribers (at selected sites). Our evaluation is relying on a combination of one-on-one qualitative interviews, demographic questionnaires, and satisfaction surveys, as well as other existing quantitative data resources to obtain relevant process and outcome indicators such as existing and new OAT prescriptions, RN/RPN prescribers, and RN/RPNs who have completed the training program.

Commitment to Partnerships and Collaboration

The Changemark project team is committed to meaningful and ongoing collaboration and engagement of key system partners and acknowledges that inclusive evaluation planning requires tailored approaches to meet the needs of the communities and individuals being engaged. The team is actively engaging an Indigenous Elder, several individuals with lived or living experience of opioid use disorder and nurses with experience prescribing OAT to review and provide feedback wherever possible, including the evaluation plan, data collection instruments and data analysis and interpretation.

Knowledge Translation Activities

Knowledge translation activities will include communication of evaluation findings, key learnings, and recommendations to relevant system and community partners across British Columbia.

Contact Information

Samantha Robinson RN MPH, Project Lead, Changemark Research + Evaluation

Contact: [REDACTED]

Appendix D

Nurse OAT Prescriber Recruitment Poster



**Are you a nurse prescriber?
We want to hear from you!**

Changemark Research + Evaluation is undertaking an evaluation of registered nurse/registered psychiatric nurse (RN/RPN) prescribing commissioned by B.C.'s Ministry of Mental Health and Addictions, in partnership with the Office of the Provincial Health Officer, Ministry of Health, health authorities, including First Nations Health Authority, BC Centre on Substance Use, BC Centre for Disease Control, and People with Living and Lived Experience (PWLLE)

For more information, please contact Sarinn Blawatt:



[Redacted phone number]



[Redacted email address]

\$50 honorarium provided for 45-60 minute interviews over the phone, by video conference, or in person where possible.

To be eligible, you must:

- 1) Be 18+
- 2) A registered RN or RPN
- 3) Completed the BCCSU nurse prescribing training
- 4) Actively or historically prescribed OAT or are working in a supportive role for nurse prescribers
- 5) Speak English



Ministry of
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Appendix E

Service User Recruitment Poster

Have you received a prescription for opioid agonist treatment (OAT) from a nurse? We want to hear from you!

Changemark Research + Evaluation is undertaking an evaluation of registered nurse/registered psychiatric nurse (RN/RPN) prescribing. We want to better understand your experience of receiving care from an OAT nurse prescriber and how your experience could be improved!

For more information, please contact Sarinn Blawatt:



Share your stories about nurse prescribing!

\$30 honorarium provided for 30-45 minute interviews over the phone, by video conference, or in person where possible.

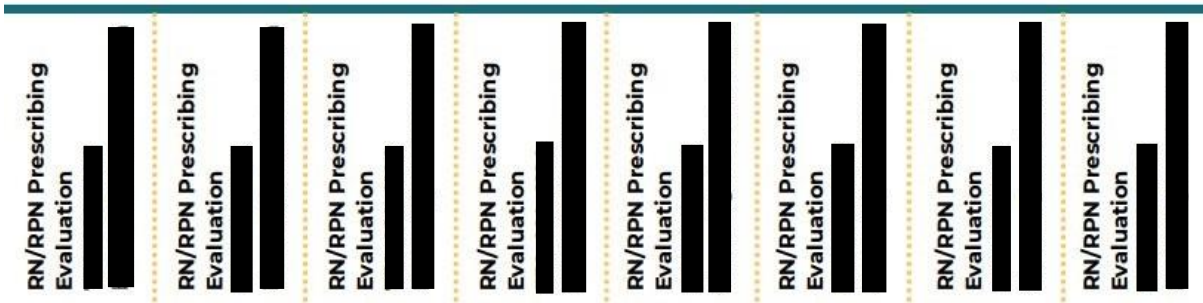
- To be eligible, you must:**
- 1) Be 18+
 - 2) Have received an OAT prescription from a nurse (if you're not sure, just ask!)
 - 3) Speak English



Changemark R+E is performing this evaluation as commissioned by B.C.'s Ministry of Mental Health and Addictions, and in partnership with the Office of the Provincial Health Officer, Ministry of Health, health authorities, including First Nations Health Authority, BC Centre on Substance Use, BC Centre for Disease Control, and People with Living and Lived Experience of opioid use disorder.



Ministry of Mental Health and Addictions



Appendix F

Interview Guide for Nurse OAT Prescriber Qualitative Interviews

Study Purpose

The Ministry of Mental Health and Addictions has contracted Changemark Research + Evaluation to undertake an evaluation of the registered nurse/registered psychiatric nurse (RN/RPN) prescribing initiative in British Columbia. This initiative provides RN/RPNs (who meet specific criteria and have received required training) with the ability to prescribe select forms of opioid agonist treatment (OAT), such as buprenorphine/naloxone, methadone, and slow-release morphine to those who receive a formal diagnosis of opioid use disorder (OUD).

Interviewer notes: *Not all questions need to be answered. Go with the flow of the participant and try to discern which questions are the most relevant to their case. This interview should take approximately 45-60 minutes. Questions with an asterisk (*) beside them should be prioritized.*

*The sections in **bold** titled “**Overarching questions to be answered**” are not directly asked of the participants. These relate back to the questions we are asking as part of the evaluation overall. Please only ask the questions below them indicated by the heading “Questions for the participant”.*

Overarching question: What does current nurse prescribing practice look like?

Questions for the participant:

*Can you describe your work environment or setting and the context within which you work? (e.g., services offered, staff groups available)

- What are the days/hours of operation?
- What are the days/hours a nurse prescriber is available? (Can include yourself or others)
- Do the services you provide extend beyond one site/community?
 - If yes, do they involve travel or telehealth?
- How does the nurse prescribing role fit with other prescribing at your site?

Can you tell me about the local climate for people who use opioids?

- *What is the context of substance use service access in your area? (e.g., available services, political climate, harm reduction initiatives, etc.)
- What are the most common characteristics of people who use opioids in your area?

*Are there Indigenous supports (e.g., staff, Elders, groups) for Indigenous people accessing the site?

- How do you refer people to these supports?
- Do you know if substance use status (e.g., abstinence) influences access to these supports?
- Do you think nurse prescribing has impacted access to these supports at all?
 - If yes, in what way?

Overarching question: Can you tell me about your experience of becoming a nurse prescribing and your current scope of work?

Questions for the participant:

*Can you describe your scope of work as a nurse prescriber?

- What is your role at the site?
- Are there other tasks you engage in outside of prescribing?
- Do you provide referrals or connections to other services, liaise with other organizations, housing support, etc.?

*Could you describe a typical encounter where you might consider prescribing OAT?

- How do patients pick up prescriptions provided by a nurse prescriber?

Overarching question: What have the facilitators and barriers been to adopting prescribing into your practice?

Questions for the participant:

*What prompted you to become a nurse prescriber of OAT?

- Were you asked by leadership or self-interest?
- What leadership-related or infrastructural factors helped you learn about, access, and complete the training?
- Are there any institutional or program policies that you know of that either help or hinder your ability to prescribe OAT?

*What are some of the barriers/challenges related to nurse prescribing practice?

- For example, staffing, policies, restrictions, practice limitations, pharmacy dispensation of medication, etc.

Overarching question: Can you please tell me about your experience of prescribing OAT?

Questions for the participant:

*How has integrating OAT prescribing into your role impacted your practice?

- Has it changed the way you interact with patients? Has it impacted the amount of time you spend performing the various functions of your role?
- If applicable, has the scope of your prior role changed since taking on nurse prescribing? If so, in what way?

*Thinking about the training you have received thus far in your role as a nurse prescriber, how was your experience related to expanding the prescribing scope (i.e., from phase 1 to phase 2 - adding Kadian and Methadone)?

- What clinical or other relevant supports do you access when faced with complex or challenging decisions related to nurse prescribing?

*Can you tell me about how you connect patients with other services when individual needs extend beyond your qualified scope?

- Which types of needs beyond your scope do you encounter most frequently?
- Are there any additional supports that would be helpful to you as a nurse prescriber?

*Aside from the formal training pathway, were you offered any additional training?

- Training on Indigenous health or Indigenous Cultural Safety (e.g., culturally sensitive care)?
- Trauma Informed Care?
- Any training related to social justice or the social determinants of health?

Overarching Question: What do you think the impact of nurse prescribing has been on access to OAT?

Questions for the participant:

Does nurse prescribing help alleviate barriers to accessing OAT and other substance use care? If so, how?

- Who does nurse prescribing benefit the most in the context of the community/communities you work with?
- Are there any evident gaps in service provision related to OAT in the context of the community/communities you work with?

Do you think people who use opioids and are seeking treatment know that nurse prescribing is an option?

- If yes, how do you think the message could continue to grow?
- If no, how could awareness be increased?

*Can you think of a time when nurse prescribing was a success?

- What made it a success?
- What patient needs were being met?

*What outcomes would best represent the successes of patients accessing OAT through nurse prescribers?

- Health outcomes? Social outcomes? Traditional wellness outcomes? Access indicators (e.g., wait times)?

*Can you think of a time when nurse prescribing negatively impacted a situation?

- With a patient? With your own practice? With others?

Overarching question: What adaptations might be needed to promote increased adoption, integration, and maintenance?

Questions for the participant:

*Are there any additional resources or training that were not provided that would be beneficial for nurse prescribers?

*Are there any internal factors (e.g., at the practical/site level) that that may lead to a greater adoption of nurse prescribing practice? Are there factors that limit it?

*Are there any external factors (e.g., at the institutional, social, or political level) that could work to help facilitate more nurse prescribing? Are there factors that limit it?

Were your expectations regarding the role of nurse prescribing met? Why or why not?

*Do you plan to continue prescribing?

- Why or why not?

In your experience, how does nurse prescribing fit into the continuum of care, in the context of the ongoing public health emergency in BC related to drug toxicity?

*Do you think nurse prescribing is sustainable at your site? Why or why not?

*What makes an effective nurse prescriber?

- What are the key ingredients to being able to be an effective nurse prescriber?

Has nurse prescribing revealed anything unexpected about the provision of OAT in BC?

Is there anything else you would like to say about nurse prescribing?

Thank you for your time and contributions!

Appendix G

Interview Guide for Service User Qualitative Interviews

Study Purpose

The Ministry of Mental Health and Addictions has contracted Changemark Research + Evaluation to undertake an evaluation of the nurse prescribing initiative in British Columbia. Beginning in 2021, eligible nurses can receive training to prescribe select forms of opioid agonist treatment (OAT), such as buprenorphine/naloxone (e.g., Suboxone), methadone/methadose, and slow-release morphine (e.g., Kadian) to people with opioid use disorder (OUD).

Interviewer notes: Not all questions need to be answered. Go with the flow of the individual in question, and try to find which questions are the most relevant to their particular case. This interview should take approximately 30 minutes. Questions with an asterisk () beside them should be prioritized.*

*The sections in **bold** titled “**Overarching questions to be answered**” are not directly asked of the participants. These relate back to the questions we are asking as part of the evaluation overall. Please only ask the questions below them indicated by the heading “Questions for the participant”.*

Overarching question to be answered: What has the experience of accessing OAT through nurse prescribers been for PWUD?

Questions for the participant:

*Can you tell me about a time when a nurse provided an OAT prescription to you?

- For example, through other healthcare services, a referral, from a friend, etc.

What opioid(s) were you using most often before/while trying to get a prescription for OAT from a nurse prescriber? *Interviewer notes: if needed, explain opioids include only ‘downers’ such as heroin, fentanyl, or other pain killers.*

- How do you use it? (e.g., inject, smoke, snort)
- How long have you been using it?
- What is your drug of choice?

*Are you currently using other non-prescription drugs?

- If yes, which ones?
- If no, did accessing OAT from a nurse prescriber influence your substance use?

*Were you accessing any other services or resources at the site offering nurse prescribing?

- For example, is there a social worker at the site, harm reduction supplies, drop-in meetings, food, or access to other healthcare needs?

Overarching question to be answered: What was the timeliness in receiving care?

Questions for the participant:

*Did you actively seek out a nurse prescriber for care? *Interviewer notes: you may have to ask if they knew about nurse prescribing and self-referred or if someone referred them to a nurse prescriber.*

Think about a time you were getting OAT from another prescriber (e.g., doctor, clinic). Try to answer the next few questions comparing the care you received then to the care you had through the nurse prescriber.

- *Approximately how long did it take for you to receive an OAT prescription from the nurse prescriber?
- Was it immediate?
 - Was it shorter, longer, or the same amount of time spent waiting compared to your experience with other prescribers?
- *Did you have to travel to get your prescription or have an appointment with the nurse prescriber?
 - Was this different compared to your experience with other prescribers (e.g., doctors)?
- *Did you use other forms of communication to get your prescription? (e.g., telephone, video call)
 - Was this option given to you?
 - Was this option given to you when you were accessing OAT from a doctor or other clinic?
- *Did anything make getting your prescription for OAT slower/faster than expected?
- For example, were there wait times, appointments that needed to be scheduled, challenges with travel, etc.?
- Do you live close to the location where your nurse prescriber is?
- Do you know how many times it took for you to get a prescription for OAT from the nurse prescriber?

*Was the nurse prescriber able to provide you with your preferred medication?

- What is your preferred medication?
 - If they were not able to give you the OAT you wanted, what happened when the nurse prescriber could not provide the medication of choice? (e.g., did it change your use of other substances or affect your quality of life?)

*Did the nurse prescriber help you with anything else, other than prescribing OAT?

- For example, referrals to other forms of treatment (e.g., detox, social supports, housing, hospital, specialist referrals, etc.)?
- Is there anything other than OAT that you would like to see a nurse prescriber help you with?

Overarching question: What are the benefits and challenges (positives and negatives) to accessing and receiving care from a nurse prescriber?

Questions for the participant:

*Were there any *positive* things that came out of your experience in getting OAT from a nurse prescriber?

How do you pick up your medication (e.g., pharmacy, delivery, etc.)?

- Do you have anything to say about the process of picking up your medication?
- Does getting the medication this way affect your ability to get OAT quickly or safely?

Is there anything different about how you *pick up your medication* from a nurse prescriber once your prescription is filled compared to past experiences with other types of health care providers like doctors?

*Has anything changed for you since getting your OAT prescription from a nurse prescriber? (e.g., any benefits or challenges you have faced as an individual that you think are related to getting the prescription?)

- Are you still on the OAT prescription you got from the nurse prescriber?
 - Why or why not?

*Do you think having nurse prescribers for OAT is helpful to yourself and/or others?

- Why or why not?

Do you think nurse prescribers have the potential to help expand access to OAT in BC?

- Why or why not?

*Do you think that accessing OAT from a nurse prescriber improved your overall health and/or wellbeing?

- For example, have you experienced any change in illicit substance use, overdose, hospital visits, housing, access to income, etc.?
- What do you think should be considered as a meaningful outcome (e.g., physical, mental, emotional, or spiritual health) related to getting OAT through a nurse prescriber?
 - For yourself? For others?

*Did you experience any barriers when trying to access OAT in general?

- Have you experienced any barriers when it comes to staying on OAT?
- Have you experienced any barriers with confidentiality?

*Were there any negative aspects of getting care from a nurse prescriber?

- If yes, how would you like to see those things changed to have a positive outcome?

Overarching question: Do certain groups experience different levels of positives or negatives in accessing nurse prescribing?

Questions for the participant:

*(*Non-indigenous*) What does person-centered care mean to you?

- Was the care you received from the nurse prescriber person-centered?
 - Why or why not?
- Do you feel involved in your care plan with the nurse prescriber?
- Do you feel comfortable discussing dose with your nurse prescriber?
- Did the care you were given take your individual needs or your personal story into account?

*(Indigenous) What does culturally sensitive/safe care mean to you?

- Was the care you received from the nurse prescriber person-centered?
 - Why or why not?
- Do you feel involved in your care plan with the nurse prescriber?
- Do you feel comfortable discussing dose with your nurse prescriber?
- Was anyone you interacted with during your experience receiving nurse prescribed OAT Indigenous?
- Did the care you were given take your individual needs or your personal story into account?
- Did you feel the nurse prescriber was being culturally sensitive to you?

*(Indigenous) Do you have access to any cultural programs or traditional wellness services through the site offering nurse prescribing?

- Does sobriety influence your ability to access them?
- How frequently do you access these programs?

*Do you intend to return to the nurse prescriber you received care from?

- Why or why not?
- (If no) Will you seek care from a nurse prescriber in the future?

Thank you for your time and contributions!

Appendix H

Nurse OAT Prescriber Demographic Questionnaire

1. What is your age?
2. What is your current gender identity?
 - Male/Man (cis male)
 - Male/Man (Transgender Male/Trans Man)
 - Female/Woman (Cis Female)
 - Female/Woman (Transgender Female/Trans Woman)
 - Two-spirit
 - Non-binary
 - Additional gender category or other, please specify: _____
 - Prefer not to answer
3. Please select which group(s) you identify with? Select all that apply.
 - White
 - Indigenous/First Nations (If yes, which Nation _____)
 - Indigenous – Métis (If yes, which Nation _____)
 - Indigenous – Inuit (If yes, which Nation _____)
 - Western European (UK, Spain, Portugal, France, Germany, Austria, Switzerland, etc.)
 - Eastern European (Poland, Hungary, Romania, Ukraine, Russia, etc.)
 - African (Nigeria, Ethiopia, Tanzania, etc.)
 - Middle Eastern (Israel, Syria, Jordan, Egypt, Iran, Iraq, etc.)
 - South Asian (India, Afghanistan, Pakistan, Sri Lanka, etc.)
 - Southeast Asian (Thailand, Vietnam, Singapore, Philippines, Indonesia, Cambodia, etc.)
 - East Asian (China, Korea, Japan, Taiwan, etc.)
 - South/Central/Latin American (Argentina, Mexico, Brazil, etc.)
 - North American (Canada, United States)
 - Oceanic (Australia, Fiji, New Zealand, etc.)
 - West Indian (Caribbean)
 - Not listed (please specify):
 - Prefer not to answer
4. What is your primary language?
 - English
 - A language other than English
 - Please specify:
5. What other languages do you speak?

6. Which health authority are you providing clinical services in?
- First Nations Health Authority
 - Fraser Health Authority
 - Interior Health Authority
 - Northern Health Authority
 - Provincial Health Services Authority
 - Vancouver Coastal Health Authority
 - Vancouver Island Health Authority
 - Other (please specify): [text box]
7. What is your professional designation?
- Nurse practitioner (NP)
 - Registered nurse (RN)
 - Registered psychiatric nurse (RPN)
 - Licensed practical nurse (LPN)
 - Other (please specify):
8. Primary Practice Location
- Urban/suburban (an area with a population over 30,000 people)
 - Rural (an area with a population of less than 29,999 and more than 30 minutes from a community with a population greater than 30,000 people)
 - Remote (an area without year-round road access and/or relies on other mode of transportation to access suburban/urban centre for part or all of the year)
 - Other (please specify):
9. How long have you been working as a nurse?
- < 1 year
 - 1-3 years
 - 3-5 years
 - > 5 years
- Total years _____
10. How long have you worked with people with substance use and/or mental health issues? (mostly non-profit)
- < 1 year
 - 1-3 years
 - 3-5 years
 - > 5 years
- Total years _____
11. What is your current area of practice?
12. What is your current role?
13. If applicable, when did you complete the nurse prescriber education and training pathway with the BCPSU?

14. How long have you been actively prescribing?
15. As of today, which forms of OAT have you prescribed?
16. Approximately how many OAT prescriptions do you estimate you have written since completing the training?
17. Approximately how many of each type of prescription do you estimate to have written:
- a. New OAT Start: _____
 - b. Re-Start: _____
 - c. Bridging OAT Prescription (i.e., from referral source): _____
 - d. Continuation Prescription (stable pt on OAT): _____
 - e. New Standard Initiation: _____
 - f. New Microdose Initiation: _____
 - g. Titration: _____
18. How many of the above to you estimate to have been provided:
- a. In person: _____
 - b. Virtually (with visual contact): _____
 - c. Virtually (phone only): _____
19. How many times have you been required to manage precipitated withdrawals:

Appendix I

Service User Demographic Questionnaire

1. Approximately how long have you been using opioids?
Prescribed: _____(years) / _____(months)
Illicit: _____(years) / _____(months)
2. Are you currently taking opioid agonist treatment?
 Yes
 No
 Not applicable
3. Have you ever received a prescription for OAT from a nurse prescriber?
 Yes
 No (*Ask the participant if they have any connection to nurse prescribing. If no link, thank the participant for their interest, apologize for the miscommunication, end the interview.*)
 Not applicable
4. Where have you received OAT from a nurse prescriber? (i.e., clinic name or location)
5. Which formulation of OAT are you currently on?
 Methadone
 Buprenorphine/Naloxone (Suboxone)
 Slow-release morphine (Kadian, M-Eslon)
 Sublocade
 liquid injectable hydromorphone
 liquid injectable diacetylmorphine
 fentanyl (patch)
 fentanyl buccal tablets (Fentora)
6. Did you receive your current prescription for OAT from a nurse prescriber?
 Yes
 No
 Not applicable
7. Which formulation(s) of OAT have you tried in the past? *Select all that apply.*
 Methadone
 Buprenorphine/Naloxone (Suboxone)
 Slow-release morphine (Kadian, M-Eslon)
 Sublocade
 liquid injectable hydromorphone
 liquid injectable diacetylmorphine
 fentanyl (patch)
 fentanyl buccal tablets (Fentora)
 Other, please describe:

8. Are you planning on returning to see the nurse prescriber for any needs related to your current OAT?

- Yes
- No
- Not applicable

Please briefly explain:

9. What is your age?

10. What is your current gender identity?

- Male/Man (cis male)
- Male/Man (Transgender Male/Trans Man)
- Female/Woman (Cis Female)
- Female/Woman (Transgender Female/Trans Woman)
- Two-spirit
- Non-binary
- Additional gender category or other, please specify: _____
- Prefer not to answer

11. Please select which group(s) you identify with? Select all that apply.

- White
- Indigenous/First Nations (If yes, which Nation _____) *
- Indigenous – Métis (If yes, which Nation _____) *
- Indigenous – Inuit (If yes, which Nation _____) *
- Western European (UK, Spain, Portugal, France, Germany, Austria, Switzerland, etc.)
- Eastern European (Poland, Hungary, Romania, Ukraine, Russia, etc.)
- African (Nigeria, Ethiopia, Tanzania, etc.)
- Middle Eastern (Israel, Syria, Jordan, Egypt, Iran, Iraq, etc.)
- South Asian (India, Afghanistan, Pakistan, Sri Lanka, etc.)
- Southeast Asian (Thailand, Vietnam, Singapore, Philippines, Indonesia, Cambodia, etc.)
- East Asian (China, Korea, Japan, Taiwan, etc.)
- South/Central/Latin American (Argentina, Mexico, Brazil, etc.)
- North American (Canada, United States)
- Oceanic (Australia, Fiji, New Zealand, etc.)
- West Indian (Caribbean)
- Not listed (please specify): _____
- Prefer not to answer

*11a. (If the participant identifies as being Indigenous) Are you currently living:

- On reserve
- Off reserve
- Prefer not to answer

12. What is your primary language?

- English
- A language other than English
 - Please specify:

13. What other languages do you speak?

14. What formal education have you received?

- None
- Some elementary school
- Some high school
- Highschool certificate
- Trades school
- Some College/University
- College/University Diploma
- Other, please specify:

15. What forms of income do you currently receive?

- None
- Social assistance (welfare)
- Social assistance (disability)
- Employment - full time
- Employment – part time
- Employment - casual
- Other: _____
- Prefer not to answer

16. Do you identify as being part of the 2SLGBTQI+ community?

- Yes
- No
- Prefer not to answer

17. Do you identify as being part of any other community?

Appendix J

Site Surveys

Part 1. Demographic information

Please answer the following questions to tell us a bit about yourself and your current professional role.

What is your age?

1. What is your current gender identity?

- Male/Man (cis male)
- Male/Man (Transgender Male/Trans Man)
- Female/Woman (Cis Female)
- Female/Woman (Transgender Female/Trans Woman)
- Two-spirit
- Non-binary
- Additional gender category or other, please specify: _____
- Prefer not to answer

2. Please select which group(s) you identify with? Select all that apply.

- White
- Indigenous/First Nations (If yes, which Nation _____)
- Indigenous – Métis (If yes, which Nation _____)
- Indigenous – Inuit (If yes, which Nation _____)
- Western European (UK, Spain, Portugal, France, Germany, Austria, Switzerland, etc.)
- Eastern European (Poland, Hungary, Romania, Ukraine, Russia, etc.)
- African (Nigeria, Ethiopia, Tanzania, etc.)
- Middle Eastern (Israel, Syria, Jordan, Egypt, Iran, Iraq, etc.)
- South Asian (India, Afghanistan, Pakistan, Sri Lanka, etc.)
- Southeast Asian (Thailand, Vietnam, Singapore, the Philippines, Indonesia, Cambodia, etc.)
- East Asian (China, Korea, Japan, Taiwan, etc.)
- South/Central/Latin American (Argentina, Mexico, Brazil, etc.)
- North American (Canada, United States)
- Oceanic (Australia, Fiji, New Zealand, etc.)
- West Indian (Caribbean)
- Not listed (please specify): [text box]
- Prefer not to answer

3. What is your primary language?

- English
- A language other than English
 - Please specify [text box]

4. What other languages do you speak?

[text box]

5. Which health authority are you providing clinical services in?
- First Nations Health Authority
 - Fraser Health Authority
 - Interior Health Authority
 - Northern Health Authority
 - Provincial Health Services Authority
 - Vancouver Coastal Health Authority
 - Vancouver Island Health Authority
 - Other (please specify): [text box]
6. What is your professional designation?
- MD (Family doctor/general practice)
 - MD (Psychiatrist)
 - MD (Other speciality)
 - Nurse practitioner (NP)
 - Registered nurse (RN)
 - Registered psychiatric nurse (RPN)
 - Licensed practical nurse (LPN)
 - Psychologist
 - Personal Support Worker (PSW)
 - Pharmacist
 - Social worker
 - Occupational therapist
 - Peer support worker
 - Clinic Liaison Worker (CLW) / Mental Health Worker (MHW)
 - Other (please specify): [text box]
7. Primary Practice Location:
- Urban/suburban (an area with a population over 30,000 people)
 - Rural (an area with a population of less than 29,999 and more than 30 minutes from a community with a population greater than 30,000 people)
 - Remote (an area without year-round road access and/or relies on other mode of transportation to access suburban/urban centre for part or all of the year)
 - Other (please specify):
8. How long have you been working in your current role?
- < 1 year
 - 1-3 years
 - 3-5 years
 - > 5 years
9. How long have you worked with people with substance use and/or mental health issues?
- < 1 year
 - 1-3 years
 - 3-5 years
 - > 5 years

Part 2. Nurse prescribing of Opioid Agonist Treatment (OAT)

The next section of the questionnaire is about your knowledge of the OAT nurse prescribing initiative and perspectives of working alongside an OAT nurse prescriber. There are no right or wrong answers.

1. How did you first learn of the OAT nurse prescribing initiative? [drop down/select one]
 - a. Provincial government press release
 - b. News or other media
 - c. Supervisor or team lead
 - d. Colleagues
 - e. Other – please describe [text box]

2. From your perspective, have there been any benefits to having one or more OAT nurse prescribers providing services in your workplace?
 - a. Yes
 - b. No
 - c. Unsure

Please explain [text box]

3. Please rate your level of agreement with the following statements from ‘strongly disagree’ to ‘strongly agree’

- a) Providing nurses with the knowledge and training to prescribe OAT has the potential to increase workforce capacity related to substance use disorder care

Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5

- b) Having nurses with the knowledge and training to prescribe OAT has resulted in increased access to substance use disorder care in the setting where I work

Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5

- c) I am aware of the role and scope of practice of the OAT nurse prescriber(s) at my site

Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5

- d) OAT nurse prescribing should be expanded in all settings.

Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5

4. What has your experience been working with an OAT nurse prescriber?
[text box]

5. From your perspective, are there any barriers or challenges to integrating nurses with the knowledge and training to prescribe OAT into your practice setting?
- Yes
 - Please explain: [text box]
 - No
 - Unsure
 - Please explain: [text box]
6. Have there been any unexpected impacts of OAT nurse prescribing at your site and/or on your own work or workflow? Please explain: [text box]
7. Would you be supportive of increasing the number of nurses with this expanded scope of practice (I.e. the ability to prescribe OAT) in your setting?
- Yes
 - Why?
 - No
 - Why not?
8. Is there anything else you'd like us to know? [text box]

Thank you so much for your time!

Appendix K

Supplementary Figures

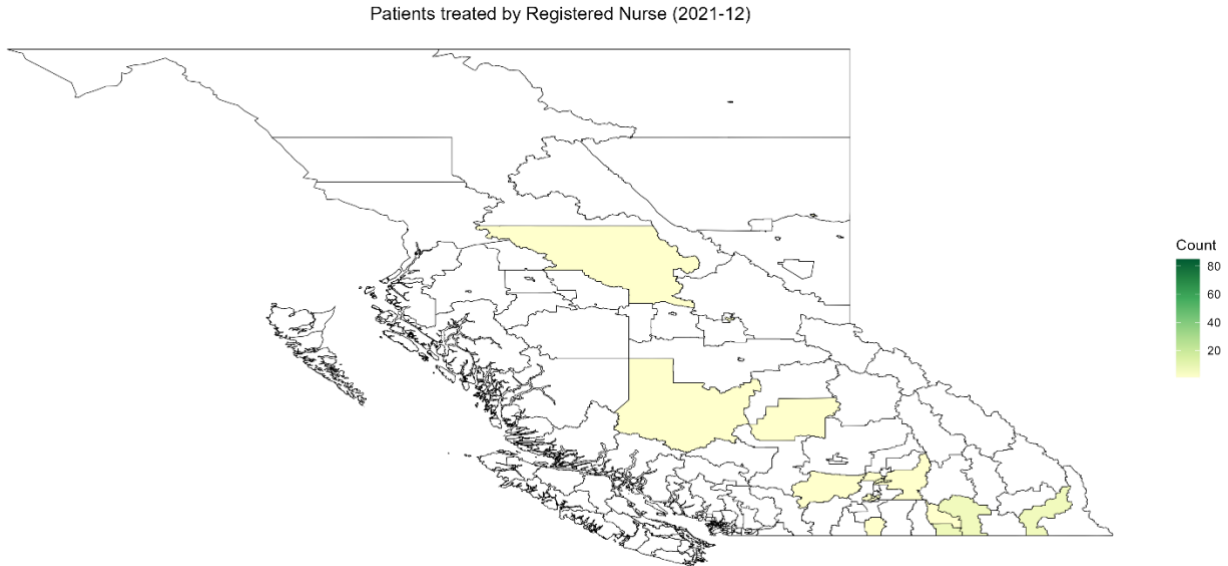


Figure L1. Patients dispensed OAT drugs from RN prescribers by Community Health Service Areas in December 2021

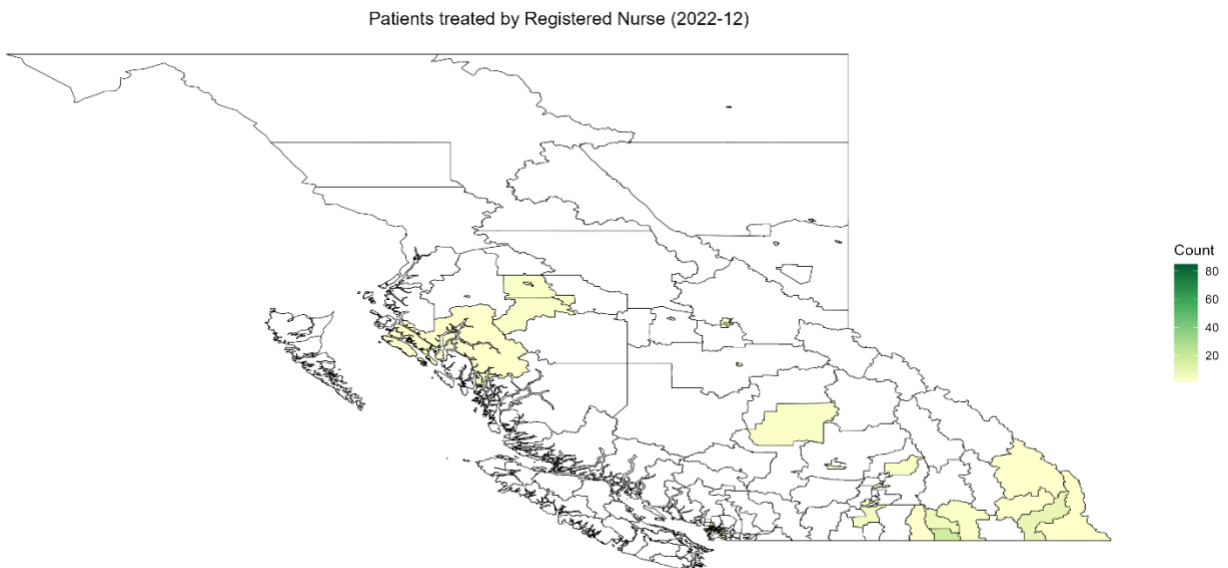


Figure L2. Patients dispensed OAT drugs from RN prescribers by Community Health Service Areas in December 2022

Patients treated by Registered Psychiatric Nurse (2021-12)

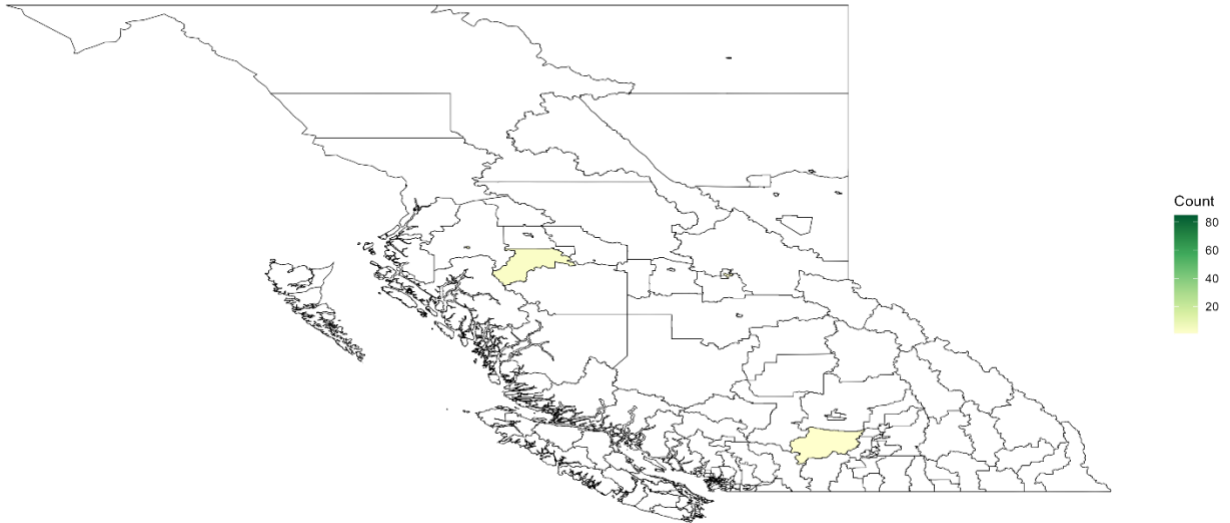


Figure L3. Patients dispensed OAT drugs from RPN prescribers by Community Health Service Areas in December 2021

Patients treated by Registered Psychiatric Nurse (2022-12)

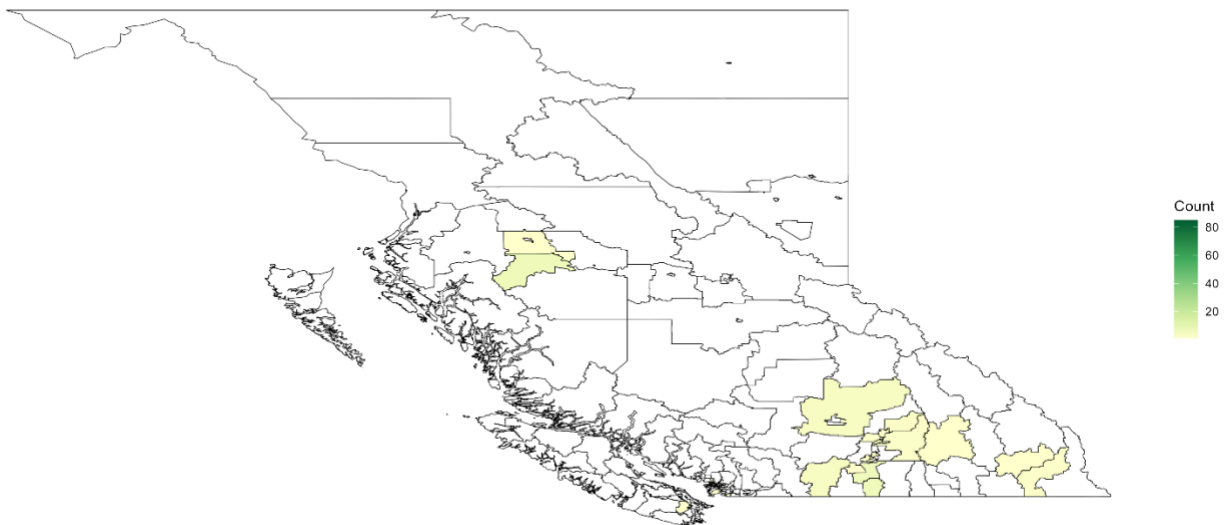


Figure L4. Patients dispensed OAT drugs from RPN prescribers by Community Health Service Areas in December 2022

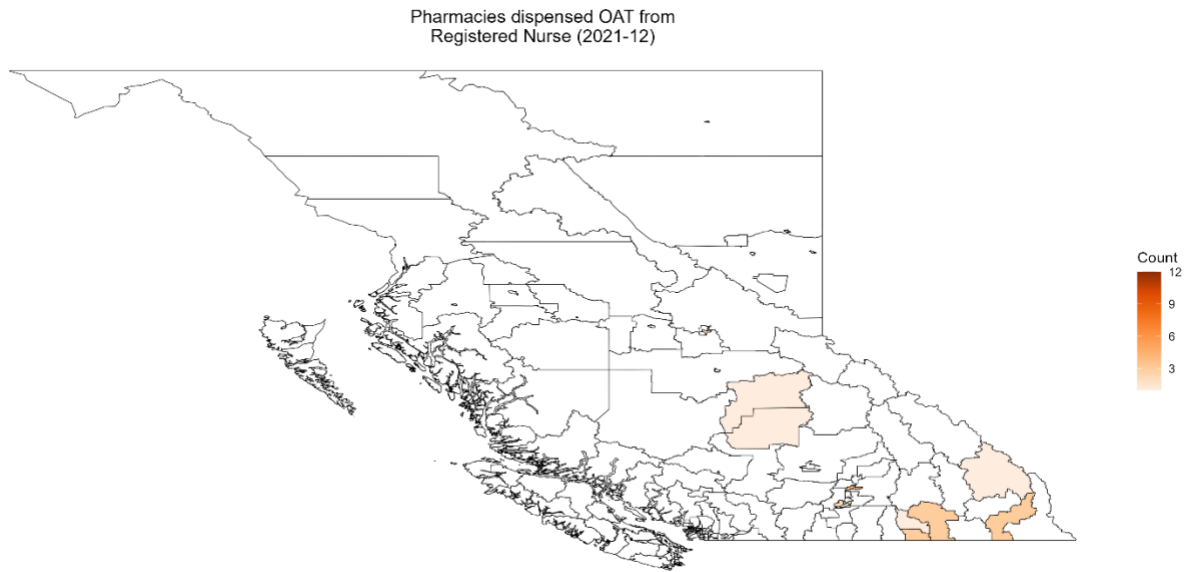


Figure L5. Pharmacies dispensed OAT drugs from RN prescribers by Community Health Service Areas in December 2021

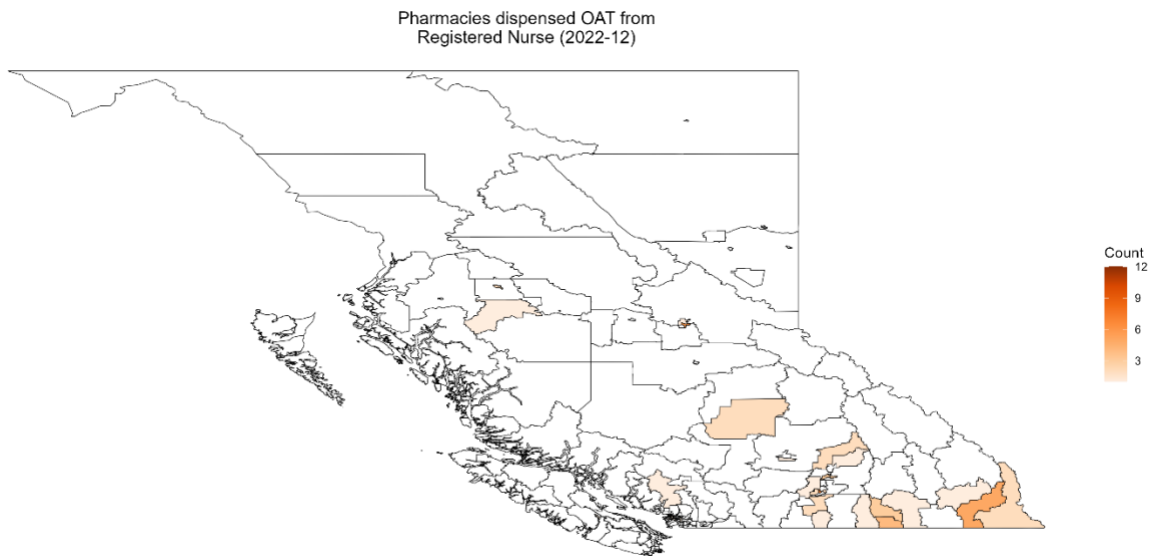


Figure L6. Pharmacies dispensed OAT drugs from RN prescribers by Community Health Service Areas in December 2022

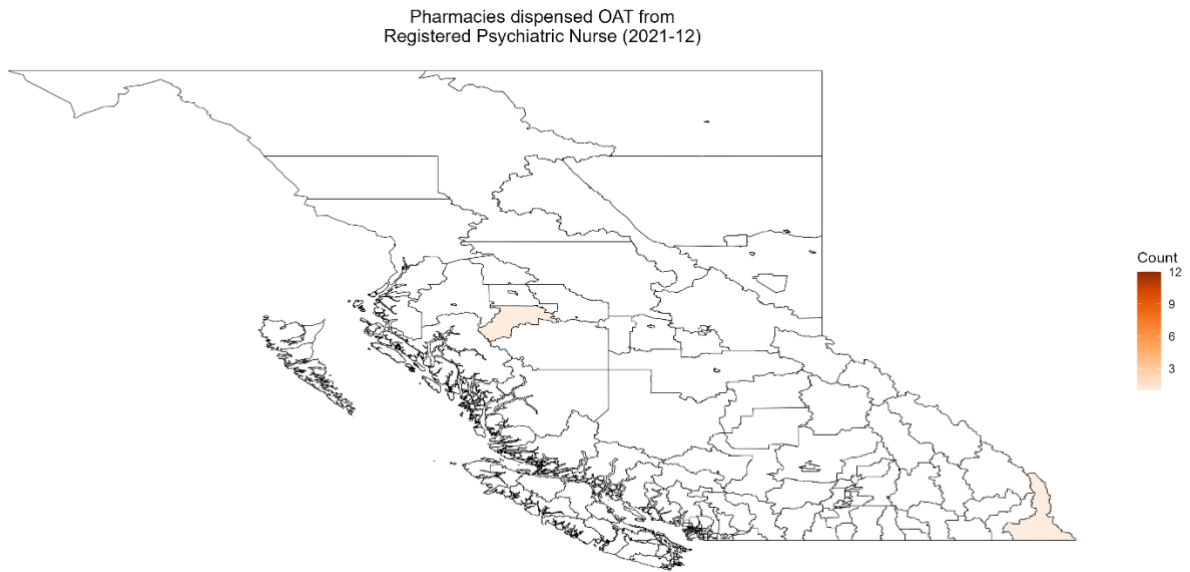


Figure L7. Pharmacies dispensed OAT drugs from RPN prescribers by Community Health Service Areas in December 2021

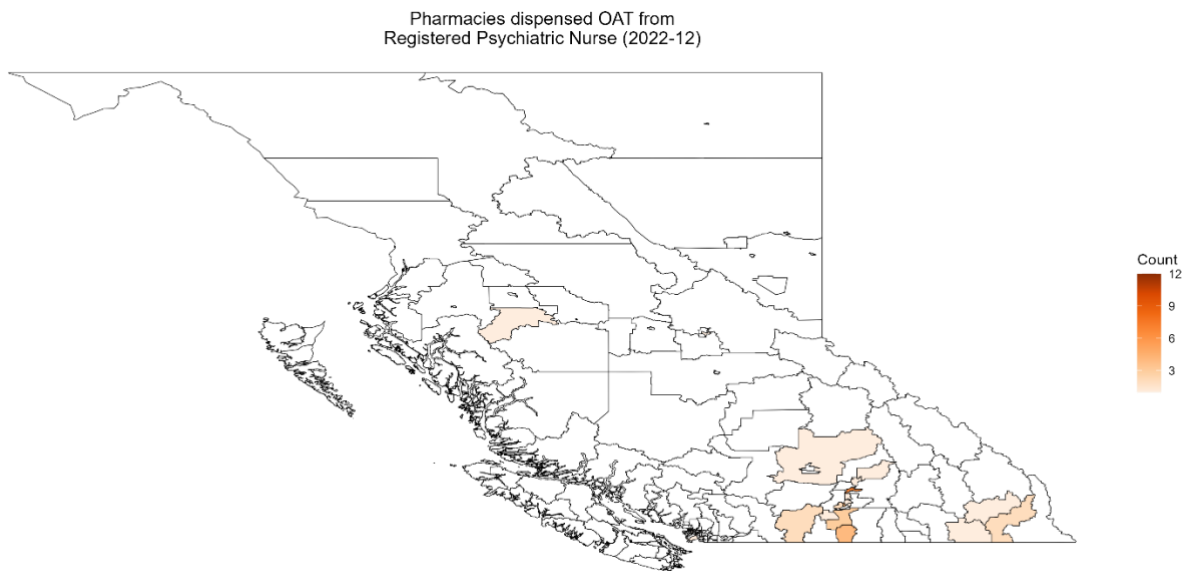


Figure L8. Pharmacies dispensed OAT drugs from RPN prescribers by Community Health Service Areas in December 2022

Appendix L

Interview Respondent Demographic Characteristics

Table M1. Demographic characteristics of qualitative interview participants (service users and nurse OAT prescribers)

	Service Users (n=10)	Nurse Prescribers (n=18)
Age		
Mean	43.9	40.2
Range	21, 65	26, 55
Gender	n	n
Female/woman	6	15
Male/man	4	3
Ethnicity	n	n
White	8	13
Indigenous/First Nations	2	1
Asian (South Asian, Southeast Asian)	0	2
Other*	0	2
Health Authority [†]	n	n
PHSA	0	2
FNHA	1	1
FHA	1	3
IHA	5	4
NHA	1	2
VCH	2	3
VIHA	1	2
Other	0	1

* Other category includes people who are of mixed ethnicity.

[†] One service user participant indicated receiving services by multiple health authorities.

Table M2. Demographic characteristics of nurse OAT prescribers

	Frequency
Professional designation (n=18)	n
Registered nurse	13
Registered Psychiatric Nurse	5
Primary practice location (n=18)*	n
Urban/suburban [†]	11
Rural [‡]	7
Remote [§]	1
Number of years working as a nurse (n=18)	
Mean	13.2
Range	2, 30
Number of years working with people with substance use and/or mental health issues (n=18)	
Mean	9.1
Range	2, 20
Forms of OAT prescribed (n=18)	n
All authorized medications (Methadone, slow-release morphine, Suboxone)	15
Suboxone	1
Not applicable [¶]	2
Estimated number of prescriptions written (n=18)	
Total (in-person and virtual combined)	2849
In-person	1840
Virtual	1009

* One participant indicated providing services in multiple location types.

[†] Urban/suburban: an area with a population over 30,000 people.

[‡] Rural: An area with a population less than 29,999 and more than 30 minutes from a community with a population greater than 30,000 people.

[§] Remote: an area without year-round road access and/or relies on other mode of transportation to access suburban/urban centre for part or all of the year).

[¶] One participant was currently doing their preceptorship and the other participant completed their preceptorship.

Table M3. Demographic characteristics of service users

	Frequency
Number of years using prescribed opioids (i.e., using pharmaceutical grade opioids) (n=10)	
Mean	5.5
Range	0.5, 20
Number of years using illicit opioids (n=10)	
Mean	11.1
Range	0.5, 37
Current OAT Formulation (n=10)*	n
Buprenorphine/Naloxone (i.e., Suboxone)	2
Long-acting buprenorphine injection (i.e., Sublocade)	2
Slow-release morphine (i.e., Kadian, M-Elson)	6
Methadone	1
Prior OAT Formulation (n=10)	n
No prior engagement with OAT (first time on OAT)	4
Prescribed OAT (any medication) at least once previously	6

* One participant indicated multiple current OAT formulations.

Appendix M

Site Survey Respondent Demographic Characteristics

Table N1. Demographic characteristics of site survey respondents

	Frequency
Age (n=18)	
Mean	44
Range	31, 63
Gender (n=18)	n
Female/woman	11
Male/man	5
Gender diverse	1
Prefer not to answer	1
Ethnicity (n=18)	n
White	15
Indigenous/First Nations	1
Other*	2
Professional designation (n=18)	n
Registered nurse	9
Other (includes mental health worker, cultural wellness worker, manager, MOA, substance use clinician)	5
Family doctor or nurse practitioner	3
Pharmacist	1
Primary practice location (n=18)	n
Urban/suburban [†]	12
Rural [‡]	6
Number of years working in current role (n=18)	
Mean	5.0
Range	0.1, 24
Number of years working with people with substance use and/or mental health issues (n=18)	n
Mean	11.4

* Other category includes people who are of mixed ethnicity.

[†] Urban/suburban: an area with a population over 30,000 people.

[‡] Rural: An area with a population less than 29,999 and more than 30 minutes from a community with a population greater than 30,000 people.

Range	2, 25
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