Methadone Maintenance Payment Program
Review

Medical Beneficiary and Pharmaceutical Services Division
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Executive Summary

This report was prepared for the Medical Beneficiary and Pharmaceutical Services Division, to provide a foundation for dialogue with stakeholders about PharmaCare’s Methadone Maintenance Payment Program (MMPP) and, more broadly, Methadone Maintenance Treatment (MMT) in British Columbia. The report examines other jurisdictions’ MMT service delivery and remuneration models and MMT best practice literature. It also examines the features of MMT in BC, provides a history and current state analysis of the MMPP, and highlights several challenges with the current MMPP model.

MMT is widely regarded as a highly effective treatment for opioid dependence and an evidence-based harm reduction intervention. The College of Physicians and Surgeons of BC, the College of Pharmacists of BC, and the Ministry of Health (the Ministry) are responsible for complementary aspects of MMT in BC. Improving BC’s methadone maintenance system—including medical, pharmaceutical and psychosocial support components—is a priority action in Healthy Minds, Healthy People: A Ten-Year Plan to Address Mental Health and Substance Use in British Columbia. The Minister of Health has also identified a review of the MMPP as a priority for 2014/15.

In 2002, Health Canada published a best practice document for MMT services, which recommends an integrated comprehensive MMT service model with a focus on engagement and retention for patient maintenance in the program, a patient-centred approach, and integrated services. Several provinces have conducted evaluations of their provincial MMT clinics that report favourable client outcomes in drug use, high-risk behaviour, housing conditions, employment status, criminal behaviour, and family support. These provincial evaluations also suggest areas of improvement, which include increased access for untreated cases, more staffing, and longer carry intervals due to the inconvenience of frequent travel.

In 2010, the Centre for Addictions Research in BC (CARBC) submitted the report Methadone Maintenance Treatment in British Columbia, 1996-2008. The CARBC review captured many positive comments from clients on the ways that methadone treatment had improved their lives. However, clients also described BC’s MMT system as problematic, primarily in the Lower Mainland. Many MMT clients reported experiencing stigma and discrimination from health care providers and the review described problematic pharmacy practices, which included pressuring clients to request daily witnessed ingestion even when not prescribed by the physician, and coercive practices to make clients use a particular pharmacy. CARBC also noted that MMT services in BC are provided through a complex and fragmented patchwork of system components and that, in rural or remote parts of the province, MMT is less accessible than in the Lower Mainland. Retention of clients in treatment, a commonly used measure of effectiveness for MMT, has also been declining slightly, and falls short of the outcome goal set in British Columbia’s Healthy Minds, Healthy People: A Ten-Year Plan to Address Mental Health and Substance Use in British Columbia.

A jurisdictional scan revealed that BC has one of the more generous remuneration schemes in Canada for dispensing methadone, and is one of only three jurisdictions with an interaction fee for witnessing ingestion of the methadone dose. PharmaCare’s current reimbursement policy was introduced in 2001, with the intent to increase the number of
pharmacies dispensing methadone and thus improve this component of access to methadone therapy—a goal that has been realized in most parts of the province. Currently, over 15,000 MMT patients are PharmaCare beneficiaries. Since the introduction of the MMPP in 2001, the number of patients and pharmacies has been steadily increasing while the number of prescribing physicians has remained fairly constant. PharmaCare’s MMPP expenditures have grown at an average annual rate of 7.6 percent since 2001, and were nearly $44 million in fiscal year (FY) 2013/14, making methadone (with its associated professional fees) PharmaCare’s second highest drug expenditure.

There is a significant concentration of MMT patients, services and PharmaCare expenditures in a small number of geographic areas in the province. Pharmacies in three Local Health Areas (Surrey, Vancouver-Downtown East side, Vancouver-Midtown) served nearly half of the PharmaCare methadone patients in the province. Many of these pharmacies serve mainly methadone patients.

The number of additional drugs the methadone maintenance patient population takes creates powerful incentives for pharmacies to put these patients on short dispensing intervals.Dispensing methadone to a single patient results in almost $6,500 per year in revenue, net of the cost of the drug. Daily dispensing of other drugs to the same patient may add a further $13,800 per patient per year.

PharmaCare has struggled to find the right remuneration scheme to support optimal dispensing of maintenance methadone. Unfortunately, it appears that the MMPP’s reimbursement policy has resulted in some unintended consequences. For over a decade, the Ministry has been dealing with cases of impropriety in methadone dispensing, such as improper billing of methadone claims and offering inducements. In 2010, the Ministry funded a joint investigation, with the College of Pharmacists, into pharmacies in the Lower Mainland. Of the pharmacies subject to the investigation, all but one — for which the Ministry chose not to proceed with a written termination hearing— have now had their Pharmacy Enrolment Agreements terminated or have voluntarily ended their relationship with PharmaCare.

In a time of fiscal constraint, there are also questions about whether MMPP expenditures are being used optimally for patient outcomes. Though the MMPP may be contributing to an accessible, effective, and appropriate methadone maintenance treatment program, there appear to be significant concerns relating to the safety, acceptability, equity, and efficiency of the MMPP.

It is apparent that delivery of MMT is complex and any hasty changes to the program, the MMPP or otherwise, could have immediate and detrimental impact on methadone patients—an already extremely vulnerable patient population. It is important to consult on the issues that have been identified and proceed cautiously before implementing any new MMPP policies.
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1. Introduction

The Medical Beneficiary and Pharmaceutical Services Division (MBPSD) is responsible for the Ministry of Health’s PharmaCare Program, which includes the Methadone Maintenance Payment Program (MMPP). The Minister of Health has identified a review of the MMPP as a priority for 2014/15, and improving BC’s methadone maintenance system—including medical, pharmaceutical and psychosocial support components—is a priority action in Healthy Minds, Healthy People: A Ten-Year Plan to Address Mental Health and Substance Use in British Columbia.

The purpose of this paper is to review PharmaCare’s methadone payment policies, and to identify issues in the current program delivery model. These issues are analysed against the framework of the BC Patient Safety and Quality Council dimensions of health quality - effectiveness, appropriateness, accessibility, safety, and acceptability – referenced in the Ministry strategy paper, “Setting Priorities for the BC Health System”.

The paper also provides a broad overview of methadone maintenance treatment in British Columbia, so that the MMPP is not viewed in isolation. Also included is information about other jurisdictions’ service delivery and remuneration models for methadone dispensing, and select academic literature about best practices for achieving the best health outcomes for patients. The intent of this review is to provide a foundation for dialogue with stakeholders regarding the MMPP, its current state, and opportunities to implement changes to improve services and outcomes for patients.

2. Background and Context

2.1 Methadone and Methadone Maintenance Treatment

Opioid dependence is a chronic, recurrent medical illness associated with co-morbid mental illness, transmission of infectious diseases (such as HIV/AIDS and hepatitis C), and premature mortality. Methadone is a long-acting, orally effective synthetic opioid, and is used as a substitute for heroin or other narcotics when treating opioid dependence. Methadone eliminates withdrawal from, and reduces cravings for, opioids. Methadone does not produce euphoria, and it blocks the euphoric effects of other opioids.

Methadone Maintenance Treatment (MMT) is widely regarded as both a highly effective treatment for opioid dependence and an evidence-based harm reduction intervention to prevent the transmission of blood-borne pathogens. Eventual withdrawal from methadone is not necessarily the goal of MMT, although some individuals may work with their physician and pharmacist to decrease their dose and eventually stop using methadone. Numerous studies have found that methadone maintenance reduces harms associated with non-medical opioid use, including injection-related risks and criminal activity, and increases social functioning and patients’ quality of life1.

There are three components to MMT: prescribing and dispensing of methadone, and provision of psychosocial supports. British Columbia has a mixed model of care; points of access include, but are not limited to: the family physician, privately and publicly funded methadone clinics, and non-profit agencies, as well as community pharmacists.

Most of the service delivery outside of the greater Vancouver area is through general/family physicians who provide MMT as part of their private practice.

In large urban centres, MMT is commonly delivered through community health centres, non-profit clinics, and health authority-based mental health and addiction services, with MMT and a range of medical services provided by physicians, nurses, psychologists, counsellors and social workers. Dispensing is mainly done through community pharmacies.

In some cases, clinics specialize in providing care to a particular population. An example is the Sheway program in Vancouver’s downtown eastside, which provides primary care, including MMT, to pregnant and parenting women.

The third model of MMT in BC is private clinics. These are clinics exclusively for MMT and usually run for profit. There is a concentration of these types of clinics in the Lower Mainland.\(^2\)

Methadone is usually dispensed by community pharmacies, which are reimbursed by PharmaCare for eligible patients. Until February 2014, maintenance methadone was dispensed to clients in a liquid form compounded in the pharmacy to a strength of 1 mg/ml from methadone powder. To address longstanding concerns about the safety and consistency of compounded methadone, PharmaCare replaced compounded methadone with Methadose\(^\circledR\) as a benefit for MMT and pain on February 1, 2014. Methadose\(^\circledR\) is a commercial methadone 10 mg/ml oral solution approved by Health Canada. Methadose\(^\circledR\) is premixed so it reduces the risk of errors associated with manual compounding, including the risk of overdose. The term “methadone” will be used in the rest of this paper to refer to methadone and Methadose\(^\circledR\).

Suboxone is also used for opioid maintenance treatment, and the BC government is moving towards using the term “opioid substitution treatment” (OST) to refer to the use of both methadone and suboxone —and on a much more limited basis, hydromorphone (Dilaudid\(^\circledR\)) and diacetylmorphine (Heroin)—for maintenance treatment.

2.2 Components of the British Columbia Methadone Maintenance Treatment Program

The College of Physicians and Surgeons of BC (the College of Physicians), the College of Pharmacists of BC (the College of Pharmacists), and the Ministry of Health are jointly responsible for complementary aspects of MMT in BC.

\(^2\) http://www.ceca-cect.ca/pdf/CECApercent20MMTpercent20Policypercent20Scanpercent20Aprilpercent202011.pdf, p.2
The College of Physicians and Surgeons

The College of Physicians regulates the practice of medicine in BC, ensuring that physicians meet expected standards of practice and conduct for the protection and safety of patients. They respond to complaints of physicians acting in an unethical or illegal manner and also administer a number of quality assurance activities to ensure physicians remain competent throughout their professional lives.3

The College of Physicians administers the Methadone Maintenance Program (MMP) in BC under the authority of the Health Professions Act and the Bylaws under the Act, and in accordance with Health Canada’s Drug Strategy and Controlled Substances Program. Physicians who wish to prescribe methadone for treatment of opioid addiction must obtain an authorization from the federal Minister of Health through the College. The MMP’s purpose is to improve the standards of methadone prescribing through physician registration, training workshops, and an audit process. The MMP assists physicians in the following ways:4

- developing guidelines for safe and effective prescribing of methadone for opioid dependence (guidelines were revised in 2014);
- providing education, including workshops on prescribing methadone for opioid dependence;
- facilitating preceptorships for physicians who wish to prescribe methadone for opioid dependence;
- conducting peer practice assessments of the physicians who are authorized to prescribe methadone;
- maintaining a central registry of methadone prescribers and registered patients; and
- making recommendations to the federal Ministry of Health (sic)5 regarding physicians’ authorizations.

With respect to patients, when entering into MMT, physicians and patients sign a standard agreement for treatment and consent form. In addition to this agreement, physicians and patients create treatment goals that both expect will result from MMT. Treatment plans describe the steps required to achieve these goals. Once a goal has been defined, a brief outline of the plan for achieving that goal should be documented to help direct patient care.

The College of Physician’s MMP Clinical Practice Guide6 states that optimal methadone prescribing occurs when good communication exists between physicians other health care providers and pharmacists. Physicians must provide a contact number for the use of other health care providers involved in the care of their registered MMP patients and pharmacists are required to notify physicians when patients miss doses.

The College of Physicians also administers the BC Prescription Review Program; a practice quality assurance activity to assist physicians with prescribing opioids, benzodiazepines and other potentially addictive medications with appropriate caution. Methadone prescribing is subject to the Prescription Review Program.

3 https://www.thecollegeofphysicians.ca/about-us
5 Minister of Health
The College of Pharmacists

The College of Pharmacists is the regulatory body for pharmacy in BC and is responsible for registering pharmacists and pharmacy technicians and licensing pharmacies throughout the province. As the regulatory body for pharmacy in BC, the College is also responsible for determining the bylaws and professional practice standards that govern the dispensing of methadone. Their mandate is to protect the public by ensuring pharmacists and pharmacy technicians provide safe and effective care to help people achieve better health.

The College is responsible for ensuring (through mandatory training and practice audits) that pharmacists and pharmacy staff who provide services related to MMT know and apply the MMT principles and guidelines established in the College’s professional practice policies and Methadone Maintenance Treatment Policy Guide\(^7\). The policy guide, updated in 2013, describes practice requirements for methadone dispensing pharmacies. Registered pharmacists in BC are permitted to purchase and dispense methadone without federal authorization.

With respect to patients, the College’s MMT Policy Guide\(^8\) states that in an effort to maximize the effectiveness of the MMT, the pharmacist may find it beneficial to engage in a dialogue with the patient that clearly outlines the expectations of both the patient and the pharmacist. This can be either when they initiate treatment or at various times throughout treatment. The Policy Guide also contains an MMT Expectation Form which outlines expectations pharmacists and patients can have for each other when undertaking MMT.

As of February 1, 2014, all pharmacy managers, staff, relief pharmacists and pharmacy technicians employed in a community pharmacy that provides pharmacy services related to MMT had successfully completed the College’s mandatory training program, and have implemented all necessary practice requirements identified in the policy guide\(^9\). The completion of the training is self-declared.

The Ministry of Health

The Ministry provides funding to the College of Physicians for administering the MMP through Medical Beneficiary and Pharmaceutical Services Division (MBPSD). The current funding agreement is in its third of five years (expiring March 31, 2017) and calls for:

- baseline funding of $465,000, which is an increase of $40,000, or approximately 9.1 percent, over the previous contract. The baseline funding amount is reflective of the number of patients registered in the program, as measured by PharmaNet per calendar year;

\(^7\)http://library.bcpharmacists.org/A-About_Us/A-8_Key_Initiatives/1029-PPP66_Policy_Guide_MMT.pdf
\(^8\)ibid
\(^9\)ibid
• funding increases in the amount of $12,500 per additional 500 patients registered in the program above the baseline. The multiplier of $12,500 per each additional 500 patients equates to $25 per patient. The existing funding through the baseline amount is $31 per patient; and
• The maximum funding under the Agreement is $2,500,000.

With respect to deliverables, the funding agreement calls for the College of Physicians to:

• receive applications from physicians wanting to prescribe methadone; recommend and forward the physician’s name to the federal Minister of Health to be considered for approval under the Controlled Drugs and Substances Act;
• provide training for new methadone prescribers and offer more advanced training for existing methadone prescribers;
• provide methadone maintenance treatment guidelines for methadone prescribers treating individuals for opioid dependency;
• maintain a central registry of all authorized methadone prescribers; and
• pursue options directed at recruiting physicians as methadone prescribers in underserviced areas of the province, to attempt to maintain an adequate number of methadone prescribers and to continue to improve their geographic distribution.

The College also provides an annual written report to the Province evaluating the effectiveness of the MMP. This includes financial statements which identify expenses incurred in the term and aggregate details about the:
• number and location of patients and prescribers taking part in the MMP;
• educational workshops (and their attendance); and
• MMP audit activity.

MBPSD is responsible for the PharmaCare program. The Ministry reimburses community pharmacies for dispensing maintenance methadone through the PharmaCare’s regular dispensing and ingredient cost reimbursement fee schedule as well as through the Methadone Maintenance Payment Program (MMPP). The majority of methadone maintenance patients are enrolled in Plan C (Recipients of B.C. Income Assistance) and, to a lesser extent, Plan I (Fair PharmaCare) which is PharmaCare’s universal, income-based plan.

Pharmacists dispensing maintenance methadone are reimbursed by PharmaCare for the drug cost up to the PharmaCare maximum price ($0.162/mL) and a dispensing fee ($10.00). Through the MMPP, PharmaCare also pays a $7.70 interaction fee for pharmacist-witnessed ingestion of methadone for maintenance.

In addition to witnessing the ingestion of the drug, to receive the interaction fee a pharmacist must:

• sign a Methadone Maintenance Payment Program Addendum to the Pharmacy Enrolment Agreement; which includes an undertaking not to bill patients more than the amounts reimbursed by PharmaCare; and
• agree not to offer cash or incentives of any kind to methadone clients. Incentives include, but are in no way limited to, air miles, loyalty points and bus passes.
PharmaCare has also covered buprenorphine plus naloxone (Suboxone®) for opioid substitution treatment since 2010. Buprenorphine is a partial opiate agonist that can be used to treat opioid dependence. The naloxone component of the formulation is intended to deter intravenous abuse of the buprenorphine component. PharmaCare coverage of buprenorphine plus naloxone is provided only for patients who meet specific Limited Coverage criteria\textsuperscript{10} and whose prescription is written by a methadone maintenance prescriber who has entered into a Collaborative Prescribing Agreement\textsuperscript{11}. MBPSD will continue to consider clinical evidence and the budget implications of providing coverage of buprenorphine plus naloxone as a regular benefit in the future.

Buprenorphine plus naloxone is supplied as sublingual tablets that require up to 10 minutes for dissolution. PharmaCare does not pay an interaction fee to pharmacists for witnessing the ingestion of buprenorphine plus naloxone. This is based on the reduced risk of drug diversion and the formulation of the product\textsuperscript{12}.

### 2.3 The Controlled Prescription Program

The objective of the Controlled Prescription Program (CPP) is to prevent forgeries and reduce inappropriate prescribing of selected drugs. The list of drugs covered by the CPP, including methadone, has been agreed to by all the participating organizations including the aforementioned regulatory Colleges and the Ministry\textsuperscript{13}.

Listed as a schedule 1A (controlled) drug in the *Pharmacy Operations and Drug Scheduling Act*, methadone may only be prescribed in writing using a special controlled prescription program pad – a duplicate pad printed for the purpose (Appendix A). Once the prescription is written, the prescriber retains the bottom copy marked “PRESCRIBERS COPY” and provides the patient with the original identified as “PHARMACY COPY,” which the patient gives to the pharmacist. Prescription forms are personalized and numerically recorded and cannot be exchanged between prescribers\textsuperscript{14}.

Prescriptions for methadone on any other form or transmitted verbally cannot be accepted by the pharmacist. The methadone maintenance controlled prescription form must specify the following:

- the patient’s information (personal health number, name, address, date of birth);
- daily dosage in milligrams, with inclusive start and stop dates;
- if the patient is restricted to daily witnessed ingestion in a pharmacy or if carry privileges (patient to take doses home) are allowed;

\textsuperscript{10} Limited Coverage drugs are not generally considered to be first-line therapies or there are more cost-effective alternatives. To be eligible for coverage of these drugs, the patient must meet the criteria pre-defined by PharmaCare. Actual coverage depends on rules of the patient’s PharmaCare plan, including any annual deductible requirement.

\textsuperscript{11} A Collaborative Prescribing Agreement is a process whereby selected prescribers receive exemptions from completing Special Authority request forms from some Limited Coverage drugs.

\textsuperscript{12} [http://www.health.gov.bc.ca/pharmacare/newsletter/10-014news.pdf](http://www.health.gov.bc.ca/pharmacare/newsletter/10-014news.pdf)


\textsuperscript{14} ibid
• Prescriber information (name, address, the College of Physicians ID, signature); and
• The signatures of the pharmacist and patient (or patient representative)\(^\text{15}\).

Failure to accurately complete the prescription forms may result in rejection of the prescription by the pharmacist.

Transfers of partly filled and undispensed methadone prescriptions are not permitted under the CPP. A patient can transfer their methadone maintenance treatment from one pharmacy to other only in-between prescriptions\(^\text{16}\).

### 3. Service Delivery Models

#### 3.1 International Service Delivery Models

As exemplified by the US, UK and Australia, delivery models for methadone maintenance treatment vary considerably in terms of regulatory environment, methadone delivery, pharmacy involvement and reimbursement. (See Appendix B for more details).

In the US, methadone may be prescribed and dispensed only through federally licensed methadone maintenance treatment programs (MMTPs) and a small number of office-based physicians who apply for special exemptions. In contrast, in the UK, physicians do not need special licensing to prescribe methadone, and methadone is primarily dispensed through community pharmacies. In Australia, MMT is offered through public and private specialty clinics, hospitals, community pharmacies and in prison. With respect to community pharmacies, there is a documented imbalance of client distribution in Australia where some pharmacies are overloaded while others are clientless.

As in Australia, the UK standard is to provide supervised consumption for approximately three months, although Scottish practice generally involves supervision for the first year. In the US, supervised daily dosing is the norm except for very stable clients who are still required to visit the MMTPs frequently for counselling and ancillary services\(^\text{17}\).

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\(^\text{17}\) Harris Jr et al., “A 5-Year Evaluation of a Methadone Medical Maintenance Program.”
The UK, particularly Scotland, has developed effective service systems that integrate primary care and specialty care in a "shared care" model where patients with lower needs are seen in primary care and those with more complex problems are moved to secondary care\textsuperscript{18}. The primary care physician manages the patient with specialist support as needed, in close collaboration with community pharmacies, and clear terms of agreement are set up to define the roles of all the parties\textsuperscript{19}. In Australia, depending on the state, treatment may be initiated in a specialist clinic or directly at a community pharmacy without specialist support and stabilization. In the UK and Australia, pharmacies play an integral part in the delivery of MMT, unlike in the US, where methadone is only available onsite from the federal treatment centres. Compared to the UK, where 63 percent of pharmacies reported offering MMT\textsuperscript{20}, only 40 percent of community pharmacies in Australia offer this service, resulting in an unmet demand for pharmacy-based dosing since specialist clinics have limited capacity.

In the UK, the drug cost and dispensing fees are negotiated nationally while the supervision fee is remunerated under local budgets. The Australian Government funds the cost of methadone itself but dispensing costs are covered by state and territory governments in correctional facilities, public clinics, and for high-risk groups\textsuperscript{21}. In private clinics and community pharmacies, clients are charged a dispensing fee which causes financial hardship and is a barrier to treatment. Similarly, in the US, where 90 percent of the treatment centres are private, patients often discontinue treatment because they are unable to make out-of-pocket payments\textsuperscript{22}.

3.2 Service Delivery Models in Canada

In 2002, Health Canada published a 104-page best practice document for Methadone Maintenance and Treatment (MMT) services in Canada, which recommends an integrated comprehensive MMT service model including psychosocial supports\textsuperscript{23}. According to Health Canada, best practice in MMT includes a focus on engagement and retention for maintenance, a patient-centred approach, and integrated services. The best practices outline specific program policies related to admission, dosing, length of treatment, urine toxicology screening and tapering. They also describe the ideal treatment team and program environment, recommending that pharmacists be designated as members of a multidisciplinary program team alongside physicians, nurses and counsellors.

\textsuperscript{18} Day et al., “Characteristics of Drug‐using Patients and Treatment Provided in Primary and Secondary Settings.”
\textsuperscript{19} Ibid.
\textsuperscript{20} Sheridan et al., “Community Pharmacies and the Provision of Opioid Substitution Services for Drug Misusers.”
\textsuperscript{21} Feyer et al., \textit{A National Funding Model for Pharmacotherapy Treatment for Opioid Dependence in Community Pharmacy}.
\textsuperscript{22} Substance Abuse and Mental Health Services Administration, \textit{Medication-Assisted Treatment for Opioid Addiction 2010 State Profiles}.
\textsuperscript{23} Health Canada, “Best Practices: Methadone Maintenance Treatment.”
While recommending integrated services as ideal, Health Canada recognizes that not all patients require the same level of treatment intensity so a continuum of different program delivery models is needed. The best practices make a provision for low threshold programs linked with more comprehensive programs in a “stepped care” model. The low threshold programs provide ongoing care for stabilized patients, who have little need for intensive services, with links to other services when needed. Clients whose lives are more stable receive their care from GPs, and those with multiple health and social needs receive their care through clinics that provide a range of specialist addictions and other types of support.

A continuum of stepped care has been found by several researchers to be effective in managing both relapses to drug use and potential methadone misuse by MMT patients. The core feature of the model is the ability to rapidly increase or decrease the amount of monitoring and counseling based on a patient’s overall clinical status, thus matching a patient to the least intensive, least costly intervention necessary to achieve the best clinical response at any point during treatment. Stepped care is also consistent with the tiered model recommended in the National Treatment Strategy, which articulates the goals of the National Framework for Action to Reduce the Harms Associated with Alcohol and Other Drugs and Substances.

Different models of MMT, reflecting different levels of intensity, exist across Canada, but linkages are lacking. Luce identifies three models:

- low threshold – no required counselling; fewer consequences if using other substances; no carries; street involved; least harm. Emphasis is on public health, infectious diseases prevention, etc.
- intensive program – comprehensive model; required counselling; urine drug monitoring; specialized MMT program. Emphasis is on integrated medical and psychosocial services.
- primary care – stabilized patients who are no longer using any substances (working, etc.); no required counselling and infrequent monitoring integrated into primary care with community pharmacies.

Even though Health Canada best practices provide for a continuum of MMT program delivery to administer treatment at different levels of intensity, most provincially funded clinics have focused on the comprehensive (intensive) model. Except for Ontario, Nova Scotia and British Columbia, the primary model of service delivery for provincially funded MMT clinics is a comprehensive addiction treatment program – including screening for intake, a medical and psychosocial assessment, prescribing, counselling and monitoring.

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24 Ibid.
26 Davison, “Stepped Care.”
27 Sobell and Sobell, “Stepped Care as a Heuristic Approach to the Treatment of Alcohol Problems.”
28 National Treatment Strategy Working Group, A Systems Approach to Substance Use in Canada: Recommendation for a National Treatment Strategy. The Strategy was developed by a national workgroup with diverse representation from across the country, co-chaired by members of the Canadian Executive Council on Addictions.
29 Luce and Strike, “A Cross ‐ Canada Scan of Methadone Maintenance Treatment Policy Developments.”
These resource-intensive programs are usually unable to meet the demand and therefore, in all provinces, physicians are addressing the gaps by providing MMT outside of the provincially funded addiction treatment system. There have been efforts, such as in Alberta, to move stabilized clients who only require minimal monitoring to family physicians in the community, but the efforts have been hampered by a lack of physicians who are willing to accept the stabilized MMT clients\textsuperscript{30}.

While three different intensity models already exist, these MMT systems are not coordinated to ensure that clients can access or transfer to a program with the required level of intensity\textsuperscript{31}. Comprehensive programs that offer the full spectrum of services are in a better position to serve patients at the required level of intensity, scaling back as patients stabilize. With the limited capacity of, and overwhelming demand on, comprehensive programs, there is a need for more low-threshold programs and a coordination system that allows smooth patient transfer to and from different models depending on need during the course of treatment.

In conclusion, Health Canada best practices provide for different intensity models for different types of patients but there has been a focus on high-intensity models, which are resource-intensive and fail to recognize that patients are a heterogeneous population with varying treatment needs that change over time.

### 3.3 Pharmacy Remuneration in Canada— A Cross-Jurisdictional Scan

In most provincially funded clinics across Canada, patients can either pick up their methadone from an onsite dispensary or fill their prescription at a community pharmacy which is more accessible – so, for example, 74 percent of the patients at the Manitoba provincially funded clinic receive their methadone from community pharmacies\textsuperscript{32}. The Prince Edward Island and Nova Scotia treatment programs start patients off with on-site dispensing but, once stabilized, they progress to the community phase where they visit their local community pharmacy once a week for an observed dose and take-home doses. Some clinics partner with community pharmacies. For example, in Ontario, as methadone must be dispensed by a pharmacist, some programs have arranged to have a pharmacist supervise dispensing and consumption at the program site or have doses delivered to the program and administered by the pharmacist or nurse. Community pharmacies play an essential role in dispensing MMT treatment in individual or group practices. Compared to prescribing or psychosocial supports, access to community pharmacies for clients on maintenance methadone is far less of a problem, except for in rural and remote areas.

Provincial drug benefit programs reimburse pharmacies for dispensing, for the costs of the medication itself and, in some cases, for witnessing the dose taken by the patient. The fees are negotiated through a contract between the community pharmacies and the ministries in each province. The reimbursement models are summarized in Appendix C.

- In most provinces, the dispensing fee includes the witnessing/interaction component.
- Only BC, Saskatchewan\textsuperscript{33} and the federal Non-insured Health Benefits (NIHB) program reimburse pharmacies for witnessing ingestion/interaction:

\textsuperscript{30} College of Physicians and Surgeons of Alberta, \textit{Alberta Methadone Maintenance Treatment Standards and Guidelines for Dependence}.

\textsuperscript{31} Luce and Strike, “A Cross-Canada Scan of Methadone Maintenance Treatment Policy Developments.”

\textsuperscript{32} Bodnarchuk, Patton, and Broszeit, “Evaluation of the AFM’s Methadone Intervention & Needle Exchange Program (m.i.n.e.).”

\textsuperscript{33} Canadian Pharmacists Association, “Pharmacists Medication Management Services: Environmental Scan.”
- BC’s fee is $7.70;
- Saskatchewan’s fee is $3.50 per day;
- The NIHB fee is $4.60 per day.

- In Saskatchewan and through the NHIB, pharmacies are allowed to claim only one dispensing fee per week.
- Quebec pays a combined dispensing and interaction fee of $14.26 for pharmacies dispensing 48,500 prescriptions or less per year and $13.26 for those dispensing more than 48,500 prescriptions.

The BC model is the most generous in offering a total professional service fee of $17.70 per day ($7.70 witnessing plus a $10 dispensing fee), followed by Quebec’s combined fee of $13.26 to 14.26, depending on prescription volumes. In contrast, the NIHB pays a total of approximately $6.03 per day ($4.60 plus 1/7 of the dispensing fee) and Saskatchewan pays $5.10 per day ($3.25 plus 1/7 of the dispensing fee).

4. Evaluating MMT Programs

The key outcomes used as measures of effective patient, population health and program outcomes in the literature include:

- retention (the length of time) in treatment;
- reduction in illicit drug use and other criminal activity;
- physical and mental health;
- population health (e.g., incidence of HIV, hepatitis C, opioid overdose fatalities); and
- improved social functioning.

The evidence suggests that there is a linear relationship between length of time in treatment and improved outcomes, which makes client retention one of the principal indicators of the success of addiction treatments. Clinical opinion generally regards the first 3–6 months in treatment to be a period of stabilization in which illicit drug use diminishes and other improvements are initiated.

Clients who stay in treatment for a year or more increase their chances of success five-fold, compared with those who drop out. Retention in treatment is, therefore, an important indicator of the success of a methadone program both while the person is in treatment and as a predictor of what is likely to happen after they leave treatment. It should be noted that there is a difference between retention in the MMT program vs. retention in opioid dependence treatment as clients may drop out of MMT but continue receiving a different kind of treatment elsewhere. The program retention rate refers to the proportion of patients still receiving treatment after a certain duration of time in a particular program.

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34 NIHB negotiates the dispensing fees with pharmacists’ associations in each province/territory. In BC, it is $10.

35 Bammer et al., “The Impact on Retention of Expansion of an Australian Public Methadone Program.”
Of note, some evidence indicates that adding specific psychosocial therapy beyond standard counselling does not necessarily improve the effectiveness of opiate substitute prescribing programs. A 2011 Cochrane Collaboration systematic review compared standard opioid maintenance treatment programs, which routinely offer counselling sessions with programs that provide additional structured psychosocial interventions such as cognitive-behavioural therapy. The study found that adding structured psychosocial therapy beyond routine counselling therapies did not make a difference to retention or substance use outcomes. Therefore, the review suggested that MMT be provided even if additional psychosocial therapies cannot be funded.

### 4.1 Program Evaluation in Canada

Provincially funded MMT programs, focused on addressing addiction through counselling and psychosocial services, typically measure their service delivery model against Health Canada’s Best Practices standard for comprehensive programs. Several provinces (Manitoba, Prince Edward Island, and Nova Scotia) have conducted evaluations of their provincial MMT clinics that report favourable client outcomes in drug use, high-risk behaviour, housing conditions, employment status, criminal behaviour, and family support. These provincial evaluations also suggested areas of improvement which include increased access for untreated cases, more staffing, and longer carry intervals due to the inconvenience of frequent travel.

Though psychosocial supports are considered integral to an optimal MMT approach, it is notable that the retention outcomes of low-threshold programs (no required counselling) compare favourably with those of more intense models. For example, the one-year retention rate at a New Brunswick Low Threshold MMT clinic was 95 percent, with 67 percent of participants achieving abstinence from illicit opioids. A Montreal clinic reported a 72 percent retention rate at 6 months. These outcomes appear to be consistent with the evidence put forward in the Cochrane Review noted above.

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36 Amato, Minozzi, and Davoli, “Psychosocial Combined with Agonist Maintenance Treatments versus Agonist Maintenance Treatments Alone for Treatment of Opioid Dependence.”

37 Bodnarchuk, Patton, and Broszeit, “Evaluation of the AFM’s Methadone Intervention & Needle Exchange Program (m.i.n.e.).”


40 Christie et al., “Evaluation of a Low-Threshold/High-Tolerance Methadone Maintenance Treatment Clinic in Saint John, New Brunswick, Canada.”

41 Perreault et al., “Determinants of Retention in a Canadian Low Threshold Methadone Maintenance Program.”


4.2 Program Evaluation in BC

In 2010, the Centre for Addictions Research in BC (CARBC) submitted the report *Methadone Maintenance Treatment in British Columbia, 1996-2008*, which identified factors that impact treatment outcomes and client satisfaction and offered recommendations for improvement.\(^{42}\) The report was based on quantitative\(^{43}\) and qualitative\(^{44}\) reviews of MMT in British Columbia, commissioned by the then Ministry of Healthy Living and Sport. The review’s conclusions, with some other evaluations that are most relevant to PharmaCare’s MMPP, are summarized below.

4.2.1 BC Service Delivery

As noted earlier, a comprehensive approach to MMT involves three service components delivered by qualified professionals: methadone prescribing, methadone dispensing and psychosocial supports, including counselling. CARBC noted that MMT services in BC are provided through a complex and fragmented patchwork of system components\(^ {45}\). The fragmented funding model means that some clients are required to pay up to $80 per month in user fees.

Most of the service delivery outside of the greater Vancouver area is through general/family physicians who provide MMT as part of their private practice. This model was identified as ideal for MMT because integrating clients within mainstream services offers them the benefits of comprehensive care and helps avoid the congregation dynamics of some MMT clinics. The general practitioner model works well for those who are more stable, or people living in northern, rural or remote areas of BC without the population to support clinics.

While private clinics, exclusively for MMT and usually run for profit\(^ {46}\), have provided needed capacity in response to high demand for MMT services, concerns have been raised about the provision of MMT separately from comprehensive care and the barriers created by user fees.\(^ {47}\)

The CARBC review identified the need for a range of low-threshold services that successfully attract and retain marginalized people with complex health care needs. While the CARBC report does not explicitly define their use of the “low-threshold” concept, it is reasonable to suppose that it is consistent with Luce’s definition (mentioned in section 3.1) and the generally agreed definition elsewhere. An individualized approach to MMT treatment was also identified as key – the need for flexible treatment options that cater to the differences between individual clients at different times of their lives and different stages of recovery.

The review concluded that “MMT should be integrated wherever possible into existing health and social services and be provided through inter-disciplinary, and stepped care models and include low-threshold care, and a range of optional psychosocial supports.”\(^ {48}\)

\(^{42}\) Reist, *Methadone Maintenance Treatment in British Columbia, 1996-2008*.


\(^{44}\) Parkes and Reist, *British Columbia Methadone Maintenance Treatment Program: A Qualitative Systems Review - Summary Report*.

\(^{45}\) Ibid.

\(^{46}\) Luce and Strike, “A Cross - Canada Scan of Methadone Maintenance Treatment Policy Developments.”

4.2.2 Access to MMT

The increase in dispensing pharmacies and program clients indicates that access has improved, however barriers remain in some areas. There was a decrease of over 100 prescribers between 2006/2007 and 2007/2008, but this did not impact the numbers of patients initiating MMT, implying that individual physicians took on more patients. The Lower Mainland (i.e. most of Vancouver Coastal Health and Fraser Health) has the largest number of physicians licensed to prescribe methadone, and the establishment of community health clinics has improved access and helped integrate methadone into primary care services. Compared to Vancouver Coastal Health, Fraser Health has less capacity, much of which is available only through private methadone clinics that charge clients user fees.

In the North, Interior, some parts of Vancouver Island, and other rural or remote parts of the province, MMT is less accessible than in the Lower Mainland, largely due to fewer prescribing physicians, but in some places because of broader community resistance to substitution treatments for addiction. Physicians identified workload and caseload as among the reasons for not wanting to take on MMT patients, especially in rural areas. While the number of dispensing pharmacies has increased significantly since the introduction of the current pharmacy payment policy, there are still some communities where methadone is not readily available and clients must travel long distances to get their medication.

4.2.3 Retention Rates

In BC, the one year retention rate increased from 40 percent in 1996 to 45.9 percent in 2001 but then declined to 40.5 percent in 2005. It improved slightly to 45 percent in 2008/09 but fell again to just over 40 percent in 2010/11, and then to 37 percent in 2011/12. This is low compared to Ontario (55 percent), the North American Opiate Medication Initiative (54.1 percent), and a Nova Scotia MMT program with a 64 percent one year retention rate. Furthermore, these retention rates fall short of the outcome goal set in British Columbia’s *Healthy Minds, Healthy People: A Ten-Year Plan to Address Mental Health and Substance Use in British Columbia*, to have 60 percent of people started on methadone maintenance treatment retained at 12 months. The declining rate of retention in BC is particularly troubling in that other current demographic trends (e.g., increasing age and levels of treated comorbidity) are associated with increased retention. The

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48 Ibid.
51 Ibid.
53 Nosyk et al., “Trends in Methadone Maintenance Treatment Participation, Retention, and Compliance to Dosing Guidelines in British Columbia, Canada.” The explanation for this is that compliance to minimally effective dose guidelines, which is independently associated with retention, fell from 2001 to 2006
54 Office of the Provincial Health Officer, *Opioid Substitution Treatment System: Performance Measures 2012/13.*
57 British Columbia, *Healthy Minds, Healthy People a Ten-Year Plan to Address Mental Health and Substance Use in British Columbia.*
CARBC report indicates that decreasing rates of compliance with prescribing guidelines mirror the negative trend in client retention\(^{58}\).

### 4.2.4 Client Perspective

The CARBC review captured many positive comments from clients on the ways that methadone treatment had improved their lives. For some, MMT helped create more safety in their lives, reducing the risk of overdose and harm from injection drug use. They felt more confident and valued and were able to reduce involvement in criminal activities.

On the other hand, many participants reported practices in BC’s MMT system that they described as unethical, abusive, or problematic in some way, primarily in the Lower Mainland. Many MMT clients reported experiencing stigma and discrimination from health care providers. Practices such as having to line up at community clinics for physician appointments or at pharmacies for dispensing methadone fuel stigma and create barriers to service.

Clients also report being perceived by some physicians or pharmacists as undesirable individuals with complex needs who might be threatening or off-putting for other patients. As a result, they reported feeling that the services they received as “addicts” or people with substance use problems were being held to a “lesser standard of care” than health services designed for other patients. Commonly cited problematic pharmacy practices included failure to witness ingestion on deliveries, pressuring clients to request daily witnessed ingestion even when not prescribed by the physician, and coercive practices to make clients use a particular pharmacy.\(^{59}\)

Clients also complained about controlling and punitive practices, and constraints on their daily lives imposed by the rules and practices of methadone treatment. It is noteworthy that while 78 percent of the PharmaNet claims for methadone maintenance are for daily witnessed ingestion, the College of Physicians’ guidelines recommend that most stable patients be established on a twice-weekly pick-up schedule, as a reasonable balance between safety and patient inconvenience. Compliance with these carry guidelines has been realized in only Vancouver Coastal Health and Fraser Health.\(^{60}\)

According to CARBC, these systemic problems with the practice at some pharmacies and clinics have resulted in clients and providers across the Lower Mainland reporting a loss of faith in the MMP.\(^{61}\)


\(^{60}\) Reist, *Methadone Maintenance Treatment in British Columbia, 1996-2008*.

\(^{61}\) Ibid, p.9
5. Current State: PharmaCare’s MMPP

5.1 Historical Development of PharmaCare’s MMPP Policy

Prior to May 2001, PharmaCare reimbursement for methadone was inconsistent, depending on the pharmacy dispensing the medication; some pharmacies charged high compounding fees to cover what they considered to be the additional costs of dealing with a difficult client group. There were also concerns about access, with methadone dispensing not available in a number of smaller communities (e.g., Creston, Pemberton).

Following consultations with the BC Pharmacy Association (BCPhA), the College of Physicians, the College of Pharmacists, and participating pharmacies, PharmaCare announced in 2001 that, in determining remuneration levels, the principles of a proposal put forward by the BCPhA would be accepted without revision. These principles informed the new payment program for methadone dispensed under the MMPP, which would include a patient interaction fee that reimbursed the pharmacist for witnessing the patient’s ingestion of the dose. Participating pharmacies sign a Methadone Addendum to the Pharmacy Participation Agreement, agreeing not to bill patients more than the amounts compensated by PharmaCare, and not to offer cash or incentives of any kind to methadone clients to secure prescriptions.

This payment program was implemented to increase the number of pharmacies dispensing methadone to improve access to methadone therapy as a harm reduction measure. This goal has been realized: in 2013/14, 778 BC pharmacies dispensed methadone, up from 280 in 2001/02.

Community pharmacies of all types - independent, chain and franchise stores - throughout the province dispense methadone. As might be expected, the largest concentration is in the Lower Mainland.

The current methadone payment program has remained largely unchanged since 2001, with the exception of increases in dispensing fees for all PharmaCare drug benefits from $7.55 to $7.60, then to $7.80, and then to $10, and the introduction of PharmaCare’s Frequency of Dispensing (FOD) policy in February 2009.

The current FOD policy was intended to curb the rapid growth of dispensing fee expenditures while ensuring that patients receive their drugs at medically appropriate intervals. The FOD and methadone dispensing policies are linked because methadone is dispensed daily, and many methadone maintenance patients are prescribed other drugs which are dispensed at frequent intervals. The FOD policy is described in detail in a separate policy review paper.

For over a decade, the Ministry has been dealing with cases of impropriety in methadone dispensing, which have been reported through various media outlets. In addition, physician complaints to the Ministry indicated that some pharmacies were offering incentives, mainly to patients that were dispensed methadone.

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62 The compounding of methadone is no longer required as a result of PharmaCare’s listing of Methadose® in 2014.

63 Cliff #344204, 2001.

64 PharmaCare Newsletter 01-5, March 27, 2001.

65 PharmaNet data September 2014. Includes methadone maintenance PINs, dispensed in claim hist (PNET) to all British Columbians.
In 2010, the Ministry agreed to fund a joint investigation with the College of Pharmacists into pharmacies in the Lower Mainland. A private investigation firm was appointed to conduct the investigations, which primarily used its employees working undercover. Letters of termination were sent to the owners of eight pharmacies that were subject to the undercover investigation for issues related to methadone dispensing such as improper billing of methadone claims and offering inducements.

Three pharmacies with the same owner (located in New Westminster and the downtown east side of Vancouver) chose to voluntarily terminate the Pharmacy Enrolment Agreements (PEAs) following an oral termination hearing. A fourth pharmacy, located in Surrey, had filed a petition for a judicial review of the decision to terminate both the PEA and Methadone Addendum following a written termination hearing. The decision to terminate was stayed to the earlier of January 1, 2015, or the date the Supreme Court rendered a decision on the merits of the judicial review. No decision was rendered by December 10, 2014, and the Ministry provided notice to the pharmacy’s clients and their physicians that the PEA would be terminated, so that the patients would have sufficient time to obtain new prescriptions and allow for continuity in their care. The pharmacy then consented to dismissal of the judicial review and further agreed to termination of the PEA and Methadone Addendum on December 15, 2014.

The Ministry decided not to proceed with the written termination hearing for another downtown eastside pharmacy that was sold subsequent to the investigation, and provided evidence of steps taken to ensure staff are appropriately managed and comply with PharmaCare and College of Pharmacist requirements.

A written termination hearing was completed for the owner of the final three pharmacies located in Abbotsford, the downtown eastside and Surrey. One pharmacy closed prior to the hearing. The decision maker determined on October 22, 2014 to cancel the two remaining pharmacies’ enrolments and terminate the Agreements. The Ministry provided notice to the pharmacies’ clients and their physicians to allow patients time to obtain new prescriptions, and allow for continuity in their care. PharmaCare permitted the pharmacies make claims to PharmaCare until December 6, 2014.

In addition to the pharmacies subject to the undercover investigation, the Ministry has served letter of termination to the owner of a pharmacy located in Surrey dated December 24, 2014. The pharmacy had until January 27, 2015, to provide written representations to the Ministry as to why the PEA and Methadone Addendum should not be terminated.
5.2 PharmaCare Remuneration to Pharmacies under the Current MMPP

In FY 2013/14, 15,467 patients were PharmaCare beneficiaries through the MMPP. These patients were served by 777 pharmacies and 363 methadone prescribers. Since the introduction of the 2001 MMPP remuneration policy, the number of patients and pharmacies, as well as PharmaCare expenditures, has been increasing. The number of prescribing physicians has remained fairly constant with a brief decline in 2007 and 2008, followed by a small but steady increase in recent years (see Figure 1). The average amount PharmaCare has paid per methadone patient per year has grown by approximately $400 to $500, while total expenditures on the MMPP have grown at an average annual rate of 7.6 percent since 2001 (See Figure 2 and Table 1). Note that the growth in total MMPP expenditures follows a similar trend as the growth in the number of MMPP patients (See Figures 1 and 2).

Figure 1

Methadone program measures: Patients, Prescribers and Pharmacies, FY2001/2002 to 2013/2014

PharmaNet data, October 2014
In 2013/14, the total amount paid by PharmaCare for methadone maintenance treatment was approximately $43.7 million\textsuperscript{67}. The ingredient cost of methadone is relatively low in comparison to expenditures on professional service fees. Approximately 78 percent of methadone claims in FY 2013/2014 had associated witnessed ingestion claims with a one-day supply of methadone. Note that professional fees (dispensing and witnessed ingestion) account for approximately 88 percent of total PharmaCare methadone expenditures.

The majority of MMPP patients are on PharmaCare’s Plan C, which provides 100 percent coverage of eligible prescription costs for B.C. residents receiving medical benefits and income assistance through the Ministry of Social Development and Social Innovation (MSDSI) (See Table 2). There are also a significant number of MMPP patients on Plan I (Fair PharmaCare). Plan I patients are subject to a deductible and a co-payment based on family net income. These patients, as well as their respective private insurers, spend millions of dollars on MMPP in excess of what PharmaCare pays annually (See Table 1; Private Paid column).

\textsuperscript{67} PharmaNet data September 2014. Includes methadone maintenance PINs, dispensed in claim hist (PNET) to all British Columbians.
Table 1

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Paid Ingredient Cost</th>
<th>Professional Fees</th>
<th>Total Paid</th>
<th>Private Paid*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Paid Dispensing Fee</td>
<td>Paid Interaction Fee</td>
<td>Total Paid Professional Fees</td>
</tr>
<tr>
<td>2002/2003</td>
<td>$2.89</td>
<td>$8.57</td>
<td>$9.35</td>
<td><strong>$17.92</strong></td>
</tr>
<tr>
<td>2004/2005</td>
<td>$3.00</td>
<td>$9.85</td>
<td>$9.79</td>
<td><strong>$19.64</strong></td>
</tr>
<tr>
<td>2005/2006</td>
<td>$3.11</td>
<td>$10.28</td>
<td>$10.17</td>
<td><strong>$20.45</strong></td>
</tr>
<tr>
<td>2006/2007</td>
<td>$3.31</td>
<td>$10.92</td>
<td>$10.80</td>
<td><strong>$21.72</strong></td>
</tr>
<tr>
<td>2007/2008</td>
<td>$3.55</td>
<td>$11.97</td>
<td>$12.48</td>
<td><strong>$24.45</strong></td>
</tr>
<tr>
<td>2009/2010</td>
<td>$4.33</td>
<td>$14.24</td>
<td>$13.60</td>
<td><strong>$27.84</strong></td>
</tr>
<tr>
<td>2010/2011</td>
<td>$4.80</td>
<td>$16.50</td>
<td>$14.73</td>
<td><strong>$31.23</strong></td>
</tr>
<tr>
<td>2011/2012</td>
<td>$5.19</td>
<td>$19.06</td>
<td>$16.03</td>
<td><strong>$35.09</strong></td>
</tr>
<tr>
<td>2012/2013</td>
<td>$5.35</td>
<td>$20.36</td>
<td>$17.39</td>
<td><strong>$37.75</strong></td>
</tr>
<tr>
<td>2013/2014</td>
<td>$5.19</td>
<td>$20.66</td>
<td>$17.87</td>
<td><strong>$38.54</strong></td>
</tr>
</tbody>
</table>

*The private paid column is calculated as the difference between the amount claimed by pharmacies and the amount paid by PharmaCare. It may over-estimate actual payments made by patients or third-party insurers. As such, it should be regarded as an upper-bound estimate of private expenditures on methadone.

Table 2

<table>
<thead>
<tr>
<th>Plan</th>
<th>Total Paid</th>
<th>Percent of total expenditures on MMPP</th>
<th>Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>$35,748,608.44</td>
<td>81.77</td>
<td>10,560</td>
</tr>
<tr>
<td>I</td>
<td>$7,847,229.99</td>
<td>17.95</td>
<td>6,533</td>
</tr>
</tbody>
</table>

MMPP patients can have methadone claims paid by both Plan I and Plan C in a fiscal year if their income level fluctuates and they are provided or removed from income assistance. Therefore, approximately 1,600 patients may be counted twice in Table 2.

Note that, for historical reasons, PharmaCare is also responsible for payment of methadone for provincial inmates receiving MMT through a pharmacy at the Provincial Distribution Centre (PDC). PharmaCare does not pay for any other drugs dispensed to inmates through the PDC pharmacy. PharmaCare pays daily dispensing fees but does not pay interaction fees for these provincial inmates.

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68 PharmaNet data, Sept 2014
69 ibid
5.3 Concentration of MMT Patients, Services and PharmaCare Expenditures.

There is a significant concentration of MMT patients, services and PharmaCare expenditures in a small number of geographic areas in the province – see Figures 3 and 4 below.

Figure 3: Number of MMPP Patients per Local Health Area (LHA), FY2013/14
Figure 4 Total PharmaCare MMPP expenditures by LHA, FY2013/14
### 5.3.1 Concentration by Pharmacy Revenue from PharmaCare Methadone Claims

Table 3 illustrates details of PharmaCare expenditures on methadone dispensing for the top 20 methadone dispensing pharmacies by PharmaCare total paid amounts in fiscal year 2013/14.

<table>
<thead>
<tr>
<th>LHA</th>
<th>Ingredient costs</th>
<th>Dispensing fees</th>
<th>Interaction fees</th>
<th>Total professional fees</th>
<th>Total paid</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Vancouver - Downtown Eastside</td>
<td>$116,224</td>
<td>$549,272</td>
<td>$433,887</td>
<td>$831,160</td>
<td>$1,099,384</td>
</tr>
<tr>
<td>2 Greater Victoria</td>
<td>$121,999</td>
<td>$479,301</td>
<td>$394,232</td>
<td>$873,533</td>
<td>$995,532</td>
</tr>
<tr>
<td>3 Surrey</td>
<td>$85,945</td>
<td>$417,461</td>
<td>$360,352</td>
<td>$777,814</td>
<td>$863,759</td>
</tr>
<tr>
<td>4 Surrey</td>
<td>$87,564</td>
<td>$411,709</td>
<td>$345,114</td>
<td>$756,823</td>
<td>$844,386</td>
</tr>
<tr>
<td>5 Vancouver - Midtown</td>
<td>$72,269</td>
<td>$403,343</td>
<td>$316,116</td>
<td>$719,459</td>
<td>$791,728</td>
</tr>
<tr>
<td>6 Vancouver - Downtown Eastside</td>
<td>$62,812</td>
<td>$366,317</td>
<td>$294,910</td>
<td>$661,227</td>
<td>$724,040</td>
</tr>
<tr>
<td>7 Nanaimo</td>
<td>$94,395</td>
<td>$291,256</td>
<td>$255,501</td>
<td>$546,757</td>
<td>$641,153</td>
</tr>
<tr>
<td>8 Vancouver - Downtown Eastside</td>
<td>$57,326</td>
<td>$309,588</td>
<td>$250,743</td>
<td>$560,331</td>
<td>$617,656</td>
</tr>
<tr>
<td>9 Vancouver - Midtown</td>
<td>$51,147</td>
<td>$300,116</td>
<td>$216,593</td>
<td>$516,709</td>
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</tr>
<tr>
<td>10 Greater Victoria</td>
<td>$65,977</td>
<td>$242,087</td>
<td>$214,476</td>
<td>$456,562</td>
<td>$522,539</td>
</tr>
<tr>
<td>11 Vancouver - City Centre</td>
<td>$49,723</td>
<td>$234,690</td>
<td>$218,195</td>
<td>$452,885</td>
<td>$502,608</td>
</tr>
<tr>
<td>12 Abbotsford</td>
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<td>$196,656</td>
<td>$251,089</td>
<td>$447,746</td>
<td>$500,541</td>
</tr>
<tr>
<td>13 Vancouver - Midtown</td>
<td>$39,248</td>
<td>$245,787</td>
<td>$190,498</td>
<td>$436,285</td>
<td>$475,534</td>
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<tr>
<td>14 Surrey</td>
<td>$47,129</td>
<td>$223,138</td>
<td>$194,271</td>
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<td>$464,538</td>
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<tr>
<td>15 Vancouver - Midtown</td>
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</tr>
<tr>
<td>16 Vancouver - Downtown Eastside</td>
<td>$45,786</td>
<td>$205,643</td>
<td>$173,935</td>
<td>$379,578</td>
<td>$425,364</td>
</tr>
<tr>
<td>17 Surrey</td>
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<td>$189,405</td>
<td>$412,583</td>
<td>$421,883</td>
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<tr>
<td>18 Abbotsford</td>
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<td>$165,018</td>
<td>$181,335</td>
<td>$364,953</td>
<td>$403,589</td>
</tr>
<tr>
<td>19 Abbotsford</td>
<td>$33,444</td>
<td>$193,621</td>
<td>$169,885</td>
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<td>$396,950</td>
</tr>
<tr>
<td>20 Kamloops</td>
<td>$75,192</td>
<td>$162,859</td>
<td>$148,287</td>
<td>$311,146</td>
<td>$386,337</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$1,262,013</strong></td>
<td><strong>$5,822,496</strong></td>
<td><strong>$4,991,117</strong></td>
<td><strong>$10,813,613</strong></td>
<td><strong>$12,075,626</strong></td>
</tr>
</tbody>
</table>

\(^{70}\) ibid
Most of the top 20 pharmacies are in the Greater Vancouver area: Metro Vancouver, Surrey and Abbotsford. For most of these pharmacies, methadone patients account for the bulk of their PharmaCare paid professional fees:

- Dispensing and interaction fees for methadone account for an average of 56 percent of their total fees.
- Professional fees associated with methadone patients – for their methadone and other prescriptions – account for an average of 85 percent of their total professional fees.

As Table 4 illustrates, these pharmacies serve nearly exclusively methadone patients. Large numbers of methadone patients are served on a frequent basis. Concerns arise that when patient volume increases, patient care suffers, as does attention to accuracy of claims submitted to PharmaCare for payment. The high number of professional fees per patient also contributes to the increasing costs of the MMPP.
### Table 4

<table>
<thead>
<tr>
<th>LHA</th>
<th>Methadone patients</th>
<th>Average non-methadone patients per day</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Patients</td>
<td>Average claims per patient</td>
</tr>
<tr>
<td>1 Vancouver - Downtown Eastside</td>
<td>508</td>
<td>120</td>
</tr>
<tr>
<td>2 Greater Victoria</td>
<td>417</td>
<td>121</td>
</tr>
<tr>
<td>3 Surrey</td>
<td>520</td>
<td>89</td>
</tr>
<tr>
<td>4 Surrey</td>
<td>416</td>
<td>104</td>
</tr>
<tr>
<td>5 Vancouver - Midtown</td>
<td>208</td>
<td>196</td>
</tr>
<tr>
<td>6 Vancouver - Downtown Eastside</td>
<td>396</td>
<td>96</td>
</tr>
<tr>
<td>7 Nanaimo</td>
<td>322</td>
<td>104</td>
</tr>
<tr>
<td>8 Vancouver - Downtown Eastside</td>
<td>158</td>
<td>203</td>
</tr>
<tr>
<td>9 Vancouver - Midtown</td>
<td>357</td>
<td>90</td>
</tr>
<tr>
<td>10 Greater Victoria</td>
<td>241</td>
<td>115</td>
</tr>
<tr>
<td>11 Vancouver - City Centre</td>
<td>360</td>
<td>79</td>
</tr>
<tr>
<td>12 Abbotsford</td>
<td>419</td>
<td>82</td>
</tr>
<tr>
<td>13 Vancouver - Midtown</td>
<td>209</td>
<td>118</td>
</tr>
<tr>
<td>14 Surrey</td>
<td>321</td>
<td>75</td>
</tr>
<tr>
<td>15 Vancouver - Midtown</td>
<td>269</td>
<td>81</td>
</tr>
<tr>
<td>16 Vancouver - Downtown Eastside</td>
<td>251</td>
<td>89</td>
</tr>
<tr>
<td>17 Surrey</td>
<td>143</td>
<td>177</td>
</tr>
<tr>
<td>18 Abbotsford</td>
<td>277</td>
<td>80</td>
</tr>
<tr>
<td>19 Abbotsford</td>
<td>231</td>
<td>96</td>
</tr>
<tr>
<td>20 Kamloops</td>
<td>387</td>
<td>50</td>
</tr>
</tbody>
</table>

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\(^{71}\) ibid
These pharmacies account for 28 percent of PharmaCare methadone program expenditures. Note that:

- These pharmacies serve a relatively high number of methadone patients in comparison to the median number of methadone patients per pharmacy for all of BC – 19.
- They also show relatively high numbers of average claims per methadone patient— the median number of claims per methadone patient was 64 for all of BC.
- These pharmacies receive high professional service fee payments per methadone patient— the average professional service fee per methadone patient was $1,005 for all of BC.
- Many of these pharmacies serviced approximately half of their total number patients on a daily basis.
- They also serve very few non-methadone patients—11 of these pharmacies serve fewer than 15 non-methadone patients on average per day.

Consider some examples of community pharmacies which dispense primarily to MMPP clients (Figures 5 and 6).

**Figure 5**

![Figure 5](image1)

**Figure 6**

![Figure 6](image2)
5.3.2 Concentration by Local Health Area

Ten of BC’s 202 Local Health Areas (LHAs) accounted for 65 percent of PharmaCare’s expenditures in fiscal year (FY) 2013/2014 (see Table 5). These 10 LHAs serviced nearly 67 percent of BC’s 15,467 MMPP patients. There are 363 methadone prescribers province wide, 323 of which prescribed methadone in these 10 LHAs in 2013/14.

Table 5

<table>
<thead>
<tr>
<th>Rank</th>
<th>LHA</th>
<th>Total Paid</th>
<th>Patients</th>
<th>Pharmacies</th>
<th>Prescribers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Surrey</td>
<td>$6,813,022</td>
<td>3,431</td>
<td>70</td>
<td>218</td>
</tr>
<tr>
<td>2</td>
<td>Vancouver - Downtown Eastside</td>
<td>$6,175,652</td>
<td>2,546</td>
<td>25</td>
<td>215</td>
</tr>
<tr>
<td>3</td>
<td>Vancouver - Midtown</td>
<td>$3,234,875</td>
<td>1,364</td>
<td>27</td>
<td>190</td>
</tr>
<tr>
<td>4</td>
<td>Greater Victoria</td>
<td>$2,880,224</td>
<td>1,028</td>
<td>39</td>
<td>102</td>
</tr>
<tr>
<td>5</td>
<td>Burnaby</td>
<td>$2,146,399</td>
<td>1,207</td>
<td>39</td>
<td>203</td>
</tr>
<tr>
<td>6</td>
<td>Abbotsford</td>
<td>$1,898,511</td>
<td>1,046</td>
<td>25</td>
<td>118</td>
</tr>
<tr>
<td>7</td>
<td>Vancouver - City Centre</td>
<td>$1,523,618</td>
<td>1,304</td>
<td>27</td>
<td>205</td>
</tr>
<tr>
<td>8</td>
<td>Coquitlam</td>
<td>$1,433,189</td>
<td>722</td>
<td>36</td>
<td>170</td>
</tr>
<tr>
<td>9</td>
<td>New Westminster</td>
<td>$1,245,317</td>
<td>709</td>
<td>18</td>
<td>137</td>
</tr>
<tr>
<td>10</td>
<td>Nanaimo</td>
<td>$1,213,330</td>
<td>638</td>
<td>19</td>
<td>84</td>
</tr>
</tbody>
</table>

Note that patients may be dispensed methadone at pharmacies in different LHAs and, therefore, may be counted twice. LHAs are identified by the pharmacy location; therefore, prescribers can also appear in multiple LHAs.

Pharmacies in Surrey, Vancouver Downtown East Side, and Midtown LHAs dispense methadone to a significant number of the province’s methadone patients (nearly 40 percent). These patients are being served by a relatively small number of pharmacies—only 16 percent of the pharmacies in the province that receive MMPP payments—which account for nearly 40 percent of PharmaCare’s methadone expenditures. Twelve pharmacies are also among the 20 highest billing methadone pharmacies in the province and service many of their LHA’s patients.

72 PharmaNet Data, October 2014
1. Surrey Local Health Area

The Surrey LHA contains four of the 20 highest billing methadone pharmacies in the province. In FY 2013/2014, these four pharmacies received $2.6 million in PharmaCare payments, primarily through professional fees, for servicing 1,190 methadone patients.73 These four pharmacies are located in the Whalley area of Surrey, where there is a concentration of 15 pharmacies in an approximately 20km² area which received $3.5 million in PharmaCare payments, again, primarily through professional fees, for servicing 2,030 methadone patients. This accounts for 59 percent of MMPP patients and 53 percent of PharmaCare’s methadone maintenance expenditures in this LHA74. Note that clusters of pharmacies providing methadone services appear in even smaller geographic areas. In Whalley, for example, there are four pharmacies providing methadone services with an area of approximately three square blocks.

Figure 7: Surrey LHA pharmacies that received PharmaCare payments for methadone dispensing in FY2013/14

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73 ibid
74 ibid
2. **Vancouver – Downtown Eastside LHA**

The Vancouver – Downtown Eastside LHA contains four of 20 highest billing methadone pharmacies in the province (including the highest). In FY 2013/14, these four pharmacies received $2.9 million in PharmaCare payments, primarily through professional fees, for servicing 1,123 methadone patients.\(^{75}\) This accounts for 46 percent of MMPP patients and 44 percent of PharmaCare’s methadone maintenance expenditures in this 9 km\(^2\) LHA.\(^{76}\) Note that there are eight pharmacies providing methadone services on a six block stretch of Hastings Street. There are two instances where there are two pharmacies on the same block in this six block stretch.

**Figure 8: Downtown Eastside LHA pharmacies that received PharmaCare payments for methadone dispensing in FY2013/14**
3. The Vancouver –Midtown LHA

The Vancouver –Midtown LHA, which borders the Downtown-Eastside LHA also contains four of the 20 highest billing methadone pharmacies. In FY 2013/14, these four pharmacies received $2.3 million in PharmaCare payments, primarily through professional fees, for servicing 912 methadone patients.\(^{77}\) This accounts for 67 percent of MMPP patients and 70 percent of PharmaCare’s methadone maintenance expenditures in this 16 km\(^2\) LHA.\(^{78}\)

**Figure 9: Midtown LHA pharmacies that received PharmaCare payments for methadone dispensing in FY2013/14**

\(^{77}\) ibid

\(^{78}\) ibid
5.4 Impact of Methadone Dispensing on Frequency of Dispensing

As Tables 4 and 5 indicate, a pharmacy in Vancouver-Midtown (the fifth highest billing methadone pharmacy) generated $791,000 in methadone-related revenue servicing only 208 methadone patients in 2013/14. In addition to MMPP payments, PharmaCare also paid this particular pharmacy an additional $572,000 in non-methadone related professional service fees for its methadone patients.\footnote{PharmaNet Data, October 2014}

Methadone is generally dispensed on a daily basis. As noted in section 5.2, approximately 78 percent of methadone claims in FY 2013/2014 were witnessed ingestion claims with a one-day supply of methadone resulting in daily dispensing fees. The number of additional drugs the methadone maintenance patient population takes creates powerful incentives for pharmacies to put these patients on short dispensing intervals. In FY 2013/14, nearly 90 percent of patients receiving methadone maintenance also had claims for other drugs paid for by PharmaCare. On average, these patients were receiving nine other drugs which were being dispensed to them in incremental amounts (4.2 days-supply per claim). PharmaCare paid $17.9 million in dispensing fees on these claims.

The FOD policy, implemented in 2009, limits the number of fees PharmaCare pays to pharmacies that dispense medications to patients on a daily basis, including methadone, to three dispensing fees per patient per day. The policy was intended to curb the rapid growth of PharmaCare dispensing fee expenditures while ensuring that patients receive their drugs at medically appropriate intervals, however it has not achieved its intended goal. MBPSD is currently reviewing the FOD policy.

Dispensing methadone to a single patient results in almost $6500 a year in revenue, net of the cost of the drug. Daily dispensing of other drugs to the same patient may add $20 in dispensing fees each day, or another $7,300 per year for a total of $13,800 per patient per year.
5.5 Methadone Patient Portrait

Methadone patients often have co-morbidities and use multiple drugs that are often also dispensed daily or as needed. Table 6 provides a sample of the other drugs methadone patients are concurrently receiving from these top 20 MMPP pharmacies. Many of the drugs being dispensed are used to treat pain, psychiatric conditions (depression, psychosis, anxiety) as well as chronic conditions (diabetes, hypertension, cholesterol, gastro-intestinal). Note that antidepressant and antiepileptic drugs can also be used as an ‘off-label’ (for an unapproved indication) treatment for other types of pain such as neuropathic pain.

Table 6

<table>
<thead>
<tr>
<th>Drug</th>
<th>Therapeutic Indication</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Quetiapine</td>
<td>Antipsychotic</td>
</tr>
<tr>
<td>2 Levothyroxine</td>
<td>Hypothyroidism</td>
</tr>
<tr>
<td>3 Ramipril</td>
<td>Hypertension, Blood Pressure</td>
</tr>
<tr>
<td>4 Metformin</td>
<td>Blood Glucose Lowering</td>
</tr>
<tr>
<td>5 Citalopram</td>
<td>Antidepressant</td>
</tr>
<tr>
<td>6 Trazodone</td>
<td>Antidepressant</td>
</tr>
<tr>
<td>7 Salbutamol</td>
<td>Asthma, and/ or Chronic Obstructive Pulmonary Disease</td>
</tr>
<tr>
<td>8 Venlafaxine</td>
<td>Antidepressant</td>
</tr>
<tr>
<td>9 Gabapentin</td>
<td>Antiepileptic</td>
</tr>
<tr>
<td>10 Hydrochlorothiazide</td>
<td>Hypertension</td>
</tr>
<tr>
<td>11 Escitalopram Oxalate</td>
<td>Antidepressant</td>
</tr>
<tr>
<td>12 Rosuvastatin Calcium</td>
<td>Cholesterol</td>
</tr>
<tr>
<td>13 Furosemide</td>
<td>Hypertension, Edema</td>
</tr>
<tr>
<td>14 Rabeprazole Sodium</td>
<td>Peptic Ulcer and Gastro-Oesophageal Reflux Disease (GORD)</td>
</tr>
<tr>
<td>15 Clonazepam</td>
<td>Antiepileptic</td>
</tr>
<tr>
<td>16 Zopiclone</td>
<td>Sedatives, Hypnotic</td>
</tr>
<tr>
<td>17 Risperidone</td>
<td>Antipsychotic</td>
</tr>
<tr>
<td>18 Ranitidine HCL</td>
<td>Peptic Ulcer and GORD</td>
</tr>
<tr>
<td>19 Lorazepam</td>
<td>Anxiolytics</td>
</tr>
<tr>
<td>20 Amlodipine Besylate</td>
<td>Hypertension, Angina</td>
</tr>
</tbody>
</table>

http://www.hc-sc.gc.ca/dhp-mps/prodpha...index-eng.php

81 Also called GERD.
Table 7 provides a snapshot of PharmaCare coverage for a single day's supply of medications for two patients at two of the top 20 methadone-dispensing pharmacies. Of note, these patients are on relatively complex drug regimens comprising multiple anti-depressants and opioids. PharmaCare's current FOD policy caps professional fees at $37.70 per day for these patients; however, these fees still comprise the majority of the PharmaCare paid amount compared with the ingredient cost.

### Table 7

**Two patients, one day of claims in a top 20 methadone pharmacy\(^2\)**

<table>
<thead>
<tr>
<th><strong>Patient A</strong></th>
<th><strong>Drug</strong></th>
<th><strong>Drug category</strong></th>
<th><strong>Days’ supply</strong></th>
<th><strong>Paid ingredient cost</strong></th>
<th><strong>Paid professional fees</strong></th>
<th><strong>Total paid</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Methadone (w/interaction fee)</td>
<td></td>
<td>1</td>
<td>$1.20</td>
<td>$17.70</td>
<td>$18.90</td>
</tr>
<tr>
<td></td>
<td>Morphine 10mg</td>
<td>Opioid</td>
<td>1</td>
<td>$0.40</td>
<td>$10.00</td>
<td>$10.40</td>
</tr>
<tr>
<td></td>
<td>Morphine 20mg</td>
<td>Opioid</td>
<td>1</td>
<td>$0.67</td>
<td>$10.00</td>
<td>$10.67</td>
</tr>
<tr>
<td></td>
<td>Citalopram 40mg</td>
<td>Antidepressant</td>
<td>1</td>
<td>$0.36</td>
<td>$0.00</td>
<td>$0.36</td>
</tr>
<tr>
<td></td>
<td>Citalopram 20mg</td>
<td>Antidepressant</td>
<td>1</td>
<td>$0.18</td>
<td>$0.00</td>
<td>$0.18</td>
</tr>
<tr>
<td></td>
<td>Gabapentin</td>
<td>Anticonvulsant/analgesic</td>
<td>1</td>
<td>$0.45</td>
<td>$0.00</td>
<td>$0.45</td>
</tr>
<tr>
<td></td>
<td>Trazodone</td>
<td>Antidepressant</td>
<td>1</td>
<td>$0.11</td>
<td>$0.00</td>
<td>$0.11</td>
</tr>
<tr>
<td></td>
<td>Tamsulosin</td>
<td>Alpha adrenergic blocking agent</td>
<td>1</td>
<td>$0.16</td>
<td>$0.00</td>
<td>$0.16</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>$3.53</strong></td>
<td><strong>$37.70</strong></td>
<td><strong>$41.23</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Patient B</strong></th>
<th><strong>Drug</strong></th>
<th><strong>Drug category</strong></th>
<th><strong>Days’ supply</strong></th>
<th><strong>Paid ingredient cost</strong></th>
<th><strong>Paid professional fees</strong></th>
<th><strong>Total paid</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Methadone (w/interaction fee)</td>
<td></td>
<td>1</td>
<td>$1.80</td>
<td>$17.70</td>
<td>$19.50</td>
</tr>
<tr>
<td></td>
<td>Risperidone</td>
<td>Antipsychotic</td>
<td>1</td>
<td>$0.31</td>
<td>$10.00</td>
<td>$10.31</td>
</tr>
<tr>
<td></td>
<td>Venlafaxine</td>
<td>Antidepressant</td>
<td>1</td>
<td>$0.37</td>
<td>$10.00</td>
<td>$10.37</td>
</tr>
<tr>
<td></td>
<td>Ibuprofen</td>
<td>Anti-inflammatory</td>
<td>1</td>
<td>$0.43</td>
<td>$0.00</td>
<td>$0.43</td>
</tr>
<tr>
<td></td>
<td>Cimetidine</td>
<td>Histamine H2-Antagonist</td>
<td>1</td>
<td>$0.55</td>
<td>$0.00</td>
<td>$0.55</td>
</tr>
<tr>
<td></td>
<td>Bupropion</td>
<td>Antidepressant</td>
<td>1</td>
<td>$0.61</td>
<td>$0.00</td>
<td>$0.61</td>
</tr>
<tr>
<td></td>
<td>Hydrochlorothiazide</td>
<td>Diuretic</td>
<td>1</td>
<td>$0.02</td>
<td>$0.00</td>
<td>$0.02</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>$4.09</strong></td>
<td><strong>$37.70</strong></td>
<td><strong>$41.79</strong></td>
</tr>
</tbody>
</table>

\(^2\) PharmaNet Data, November 2014
Since April 2011, PharmaCare has paid for medication management and review services provided by community pharmacists to eligible residents with complex drug regimens and health needs.

A medication review is a one-on-one appointment between a patient and pharmacist in which medication information is gathered, validated, summarized and reviewed. The goals of the medication review are to: increase patients’ understanding of what medications are being taken, why they are being taken and how they are to be taken for optimal benefit; create a medication management plan to address any issues, where appropriate; and create a Best Possible Medication History that improves communication, maintains continuity of care and reduces the risk of drug therapy problems. To be eligible, patients must have at least five different qualifying medications on their PharmaNet profile in the last six months and a demonstrated clinical need for the service.

Table 8 illustrates that 5 of the top 20 methadone-dispensing pharmacies performed no medication review services for methadone patients, while another 5 pharmacies performed fewer than 10 medication reviews—these 10 pharmacies served approximately 2,800, or 18 percent, of the province’s total MMPP patient population in FY 2013/14.

Medication review follow-up services are also available for patients, but there is little difference between the number of claims being submitted and the number of patients being served, which indicates that only the initial medication review service is being provided. It should be noted that not all methadone patients would qualify for a medication review; however, given that many methadone patients have complex care needs, it appears that many methadone dispensing pharmacies are not taking the time to perform a Ministry-funded service that aims to reduce the risk of drug therapy problems.
### Table 8

<table>
<thead>
<tr>
<th>Rank</th>
<th>LHA</th>
<th>Claims</th>
<th>Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Vancouver - Downtown Eastside</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>2</td>
<td>Greater Victoria</td>
<td>22</td>
<td>19</td>
</tr>
<tr>
<td>3</td>
<td>Surrey</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>Surrey</td>
<td>42</td>
<td>42</td>
</tr>
<tr>
<td>5</td>
<td>Vancouver - Midtown</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>6</td>
<td>Vancouver - Downtown Eastside</td>
<td>29</td>
<td>29</td>
</tr>
<tr>
<td>7</td>
<td>Nanaimo</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>Vancouver - Downtown Eastside</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>9</td>
<td>Vancouver - Midtown</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>Greater Victoria</td>
<td>63</td>
<td>57</td>
</tr>
<tr>
<td>11</td>
<td>Vancouver - City Centre</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>12</td>
<td>Abbotsford</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>13</td>
<td>Vancouver - Midtown</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>14</td>
<td>Surrey</td>
<td>39</td>
<td>33</td>
</tr>
<tr>
<td>15</td>
<td>Vancouver - Midtown</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>16</td>
<td>Vancouver - Downtown Eastside</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>17</td>
<td>Surrey</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>18</td>
<td>Abbotsford</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>19</td>
<td>Abbotsford</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>20</td>
<td>Kamloops</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

---

### 6. Stakeholder Environment

#### 6.1 The Regulatory Colleges

The College of Physicians and Surgeons has been working with the Ministry on the MMP since 1996 and receives annual funding from MBPSD for administering the MMP. In recent informal discussions, representatives of the College indicated that a priority should be ensuring that patients can access MMT related services across the province, and that a complete inventory of MMT services would help identify gaps in service. They expressed concern that current service provision is very lower mainland-centric and provides inconsistent access in rural areas. They voiced the need for a long term vision for MMT in the province.

The College of Pharmacists has also been an active partner in aspects of the methadone maintenance program, including leading the joint Ministry investigation into pharmacy impropriety discussed in section 5.1. In informal discussions about MMT in the province, representatives of the

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83 Rankings same as in table 4 – by PharmaCare expenditure; PharmaNet Data. November, 2014
College emphasized the need to examine the whole model for methadone maintenance patient care—not just pharmacy remuneration in isolation. They highlighted the effort that has gone into program improvements in the past 15 years—such as the development of practice standards for pharmacists—and cautioned against making program changes that could reduce patient access or safety. Program changes should be carefully considered in collaboration with the many stakeholders interested in methadone maintenance because of the ripple effects that will inevitably result from changes.

6.2 The BC Pharmacy Association

The BC Pharmacy Association (BCPhA) is a not-for-profit association, which aims to support and advance the financial well-being and professional role of its members and advocate on their behalf with government. The BCPhA represents more than 2,600\textsuperscript{84} of 5,018 registered pharmacists,\textsuperscript{85} and 800\textsuperscript{86} of British Columbia’s approximately 1,186 pharmacies\textsuperscript{87}.

The BCPhA has indicated that they share many of the Ministry’s concerns about the MMPP and are committed to working alongside other key stakeholders to address concerns about dispensing practices in some pharmacies enrolled in the MMPP in order to preserve the role of pharmacists in the MMPP. Though the BCPhA welcomes a review of the MMPP, they caution that restructuring the current program could result in restricted access to treatment and hope that the review will include input from addiction and social service experts. As noted earlier in this paper, the BCPhA was directly involved in the creation of PharmaCare’s current MMPP remuneration policy.

6.3 The Neighborhood Pharmacy Association of Canada

The Neighbourhood Pharmacy Association of Canada (NPAC), a national association representing the majority of community pharmacy in Canada, plays an active role in bringing together key stakeholders in the pharmacy industry. A core objective of the NPAC is to proactively engage government in dialogue to build understanding of and support for the role of member pharmacies and pharmacists in providing neighbourhood-based healthcare services\textsuperscript{88}.

6.4 Ministerial and Intergovernmental Stakeholders

The Ministry of Health’s Population and Public Health Division, Communicable Disease Prevention, Harm Reduction and Mental Health Promotion (CHM) branch provides provincial oversight of BC’s problematic substance use prevention, blood-borne pathogens (including HIV/AIDS), mental health promotion, and harm reduction strategies\textsuperscript{89}.

\textsuperscript{84} British Columbia Pharmacy Association website. \url{http://www.bcpharmacy.ca/about-bcpha-phaa}
\textsuperscript{85} College of Pharmacists of BC’s Annual Report for the fiscal year 2011/12. \url{http://www.bcpharmacists.org/about_us/annual_reports.php}
\textsuperscript{86} British Columbia Pharmacy Association website. \url{http://www.bcpharmacy.ca/about-bcpha-phaa}
\textsuperscript{87} College of Pharmacists of BC’s Annual Report for the fiscal year 2011/12. \url{http://www.bcpharmacists.org/about_us/annual_reports.php}
\textsuperscript{88} \url{http://www.cacds.com/en/aboutus/mission.htm}
\textsuperscript{89} \url{http://www.health.gov.bc.ca/cdms/}
The Ministry’s Health Services Policy & Quality Assurance Division’s (HSPQAD) Mental Health and Substance Use Program is currently working on a report about strengthening psychosocial supports for opioid substitution therapy in BC. The HSPQAD’s Patients as Partners group had also helped fund an opioid substitution treatment (OST) patients’ meeting in March 2014, as an ancillary event to the OST Health System Partners’ meeting.

The Ministry’s Financial and Corporate Services Division, Audit and Investigations Branch (PharmaCare Audit) performs audits to ensure providers—and claims for drugs, medical supplies, and services made to PharmaCare by providers—are in compliance with the provisions of the Pharmaceutical Services Act; the terms of any agreement between a provider and the Province, and PharmaCare policies and procedures.

The Health Authorities provide mental health and substance abuse services. MBPSD staff has engaged staff from Vancouver Coastal and Interior Health regarding the services they provide and the experience they have had in providing services related to MMT.

Where no other appropriate service is available in a community, the Ministry of Social Development and Social Innovation currently provides eligible clients with up to $500 per year for non-residential substance use counselling services ($41.66 per month). This supplement can be used to cover the cost of counselling services provided by a methadone program.

The City of Vancouver has established the Mayor’s Task Force on Mental Health and Addictions. The mandate of the task force is to help the City identify priority actions to improve quality, accessibility, and choice within the system of care for people with serious mental health and addiction issues. Other municipalities with high numbers of MMPP pharmacies may be interested providing input as well.

6.5 Centre for Addiction Research of BC

The University of Victoria’s Centre for Addictions Research of BC (CARBC) is a network of individuals and groups dedicated to the study of substance use and addiction in support of community-wide efforts to promote health and reduce harm. As referenced in section 4.2, CARBC published a review of MMT in BC in 2010. In their response to the review (APPENDIX D), government cited several initiatives that were underway to improve MMT in BC, and that it would consider a more coordinated approach to MMT service delivery in BC.

6.6 Patients

The Vancouver Area Network of Drugs Users (VANDU) is a group of users and former users who, through user-based peer support and education, work to improve the lives of people who use illicit drugs. A community group affiliated with VANDU is the British Columbia Association for People on

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90 Provided by Dana Jensen, Director of Disability, Transitions and CLBC Policy, Strategic Policy Branch, Ministry of Social Development
92 [http://www.carbc.ca/About/About/OurOrganization.aspx](http://www.carbc.ca/About/About/OurOrganization.aspx)
93 [http://vandu.org/](http://vandu.org/)
Methadone, an organization which provides support and information for people on methadone. Members meet to discuss issues such as methadone user rights, and medical and legal issues.

**7. Legal Environment/Context**

Currently, in order to submit claims to the PharmaCare program and receive payments for interaction fees, a pharmacy must enroll as a provider by signing a PharmaCare Enrollment Agreement (PEA) and sign a Methadone Maintenance Payment Program Addendum. These contracts specify all the terms and conditions related to provider participation in the PharmaCare program and the MMPP.

This present enrollment framework has presented a series of challenges related to PharmaCare’s ability to hold providers accountable for inappropriate activity and ensure billing integrity. PharmaCare has also found it difficult to terminate the PEAs of various pharmacies as a result of improper billing of methadone claims and offering inducements.

On May 31, 2012, the *Pharmaceutical Services Act* (the Act) came into force. The Act shifts the PharmaCare program from one which relied on policy to one protected by legislation. The Act creates the authority for regulating drug plans and formularies, and enrolling beneficiaries and providers. Although the Act came into force in May 2012, transition provisions have permitted the existing policy-based scheme to continue for three years. Regulations are currently being drafted respecting the role and obligations of community pharmacies wishing to enroll as PharmaCare providers.

Once the regulation regarding providers comes into force, provider enrolment will be regulated under the provisions of the regulation rather than the terms of the PEA. This will strengthen PharmaCare’s ability to deny enrollment of pharmacies which have had a documented history of improper billing and/or offering incentives to methadone patients. These practices are illegal under the Act, and the provider regulation will also enable PharmaCare to deny or suspend MMPP payments to pharmacies engaged in these practices.

**8. Challenges and Issues with the MMPP**

MBPSD is committed to a health system that supports people to stay healthy, and when they are sick, provides high quality publicly funded health care services that meet their needs. MBPSD’s goal is to deliver an accessible, responsive, evidence-informed, sustainable drug program through the development of innovative and responsive policies and practices.

BC was a pioneer in methadone maintenance treatment; however, PharmaCare has struggled to find the right remuneration scheme to support dispensing of maintenance methadone. The current PharmaCare remuneration policy introduced in 2001 aimed to increase access, and it has been successful, at least in urban areas, in achieving that. However, as of 2013/14, methadone (ingredient cost, dispensing fees, and witnessed ingestion fees) ranked as PharmaCare’s second highest drug expenditure, at $44 million. In a time of fiscal constraints there are naturally

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94 http://bcapom.wordpress.com/about/

95 PharmaCare Trends 2013-14; PharmaNet Data, 2014
questions about whether this money is being spent optimally for patient outcomes. Nine issues have been identified which relate directly to expenditures and quality of care:

1. Since the introduction of the MMPP, total PharmaCare methadone-related expenditures have grown at an average annual rate of 7.6 percent. It is not clear that the increase in expenditure is associated with a commensurate improvement in patient outcomes. As discussed in section 4.1, longer retention in MMT is correlated with better long-term health outcomes and effective MMT. In 2011/12, only 37 percent of new patients were retained in MMT after one year. Lower retention rates of new MMT patients is occurring while the number of methadone patients is steadily increasing (See Section 5.2, Figure 1).

2. BC offers by far the most generous compensation for professional service fees in Canada and is only one of only three Canadian jurisdictions that reimburses pharmacies for witnessing ingestion. Conservatively speaking, dispensing methadone to a single patient results in almost $6,500 a year in pharmacy revenue, net of the cost of the drug. Given that patients are now receiving premixed Methadose® which reduces the risk of errors associated with manual compounding, including the risk of overdose, it is not clear which health care service the witnessed ingestion fee is supporting – is it just to prevent diversion onto the street market, or are other services such as counselling the fee represents?

3. Maintenance methadone dispensing is associated with frequent dispensing of other drugs since methadone patients often have co-morbidities and use multiple drugs that are often also dispensed daily. This may result in payment of an additional $20 in dispensing fees each day per patient or another $7,300 per year for a total of $13,800 per patient per year. Is this expenditure, solely related to service fees, the optimal use of these funds for this vulnerable patient population with complex health needs?

4. PharmaCare Audit and PharmaCare have been devoting increasing resources to investigating and managing agreements with pharmacies engaged in improper methadone-related billing practices and in offering incentives to patients who were dispensed methadone. There have also been allegations of unregulated recovery homes requiring residents to fill their prescriptions, including methadone, at a specific pharmacy96. These practices are contrary to the terms of the PharmaCare Enrolment Agreement and the Methadone Maintenance Payment Program Addendum.

5. There is a heavy concentration of MMPP pharmacies in certain urban areas and in many cases there are clusters of pharmacies servicing primarily methadone patients within only a few city blocks. While an argument can be made that this is where the client base is located, there are concerns with how these retail businesses are competing with each other for business and whether there are efficiencies to be gained in reviewing this business model. Furthermore, some residents and business owners in proximity to methadone dispensing pharmacies have recently been complaining to their municipalities about loitering and unpleasant behaviour near these pharmacies.

6. In contrast, there may still be rural areas which are underserved by pharmacies.

7. Certain pharmacies are serving high numbers of methadone patients and few other customers. While theoretically this “specialization” could lead to an expertise in treating this patient population, there are concerns that as patient volume increases, patient care suffers, as does attention to accuracy of claims submitted to PharmaCare for payment.

8. To our knowledge, there is limited ongoing collaboration and communication among pharmacists and patients’ other health care providers in a care setting that supports a team approach to optimal patient-centred care.

Dispensing a daily dose of methadone can be considered an important low-threshold service for marginalized people with complex health care needs. Best practice suggests that low-threshold programs be linked with more comprehensive programs or with other services when needed. However, in the current pharmacy setting, beyond dispensing, there appears to be an absence of coordinating appropriate levels of healthcare service(s) that might be needed to address the complexity of a methadone patient’s healthcare needs. The CARBC 2010 evaluation identified a patchwork of system components and a fragmented funding model as concerns with MMT in BC.

9. The public health and mental health and substance use field and other areas in the Ministry now refer to opioid substitution treatment (OST) rather than MMT in order to include buprenorphine plus naloxone, and the more limited use hydromorphone/diacetylmorphine. PharmaCare payment structures and program names have not yet adapted to this development in the field. PharmaCare may also wish to continue to monitor the clinical evidence and economic feasibility of other OST.

These important issues can be framed using the BC Patient Safety and Quality Council’s dimensions of quality used in the Ministry of Health’s 2014 Strategic Plan: effectiveness, appropriateness, accessibility, safety and acceptability. These terms are defined as follows:

- **Accessibility**: Ease with which health services are reached.
- **Safety**: Avoiding harm resulting from care.
- **Effectiveness**: Care that is known to achieve intended outcomes.
- ** Appropriateness**: Care that is provided is evidence-based and specific to individual clinical needs.
- **Acceptability**: Care that is respectful to patient and family preferences, needs and values.

Additionally, we will also use two additional features of this model to examine value for money.

- **Equity**: distribution of health care and its benefits fairly according to need
- **Efficiency**: optimal use of resources to yield maximum benefits and results

The MMPP provides some cause for concern. Access to treatment is readily available in the lower mainland but not necessarily equally available in all areas of BC. Though MMT is shown to be an effective and appropriate treatment for opioid dependence, are MMPP pharmacies, operating in areas where a high concentration of clients and services exist, providing care that is both safe and acceptable?
The equity and efficiency of the MMPP is also cause for concern given that a relatively small number of pharmacies in concentrated geographical areas are receiving the majority of MMPP payments and servicing a majority of methadone patients—the same areas where there have been reports and evidence of improprieties in methadone dispensing practices and PharmaCare billing issues.

9. Conclusion

Methadone is a widely used substitute for heroin or other narcotics when treating opioid dependence. The College of Physicians, the College of Pharmacists, and the Ministry of Health’s PharmaCare program are responsible for complementary aspects of MMT in BC through the controlled prescribing and dispensing of methadone.

This paper examined PharmaCare’s MMPP, identifying issues in the current program delivery model with particular attention to the impacts of PharmaCare’s current remuneration model for dispensing methadone. It also presented information about other jurisdictions’ service delivery and remuneration models for methadone dispensing, and academic literature about best practices for achieving the best health outcomes for patients.

Using the BC Patient Safety and Quality Council dimensions of health quality as a framework for analysis, the Ministry’s PharmaCare program identified issues and challenges relating to the MMPP’s effectiveness, its public perception, its financial sustainability and whether it falls within the Ministry’s fiscal objectives.

The CARBC review points to several issues with the overall structure of MMT in BC including a patchwork of system components and a fragmented funding model. The review reported concerns that the current compensation mechanism for methadone dispensing has distorted MMT in significant ways, incentivizing problematic pharmacy practices and negatively impacting access, retention, quality, effectiveness, equality, client satisfaction, public perception and health outcomes.

10. Next Steps

It is apparent that MMT is complex and any hasty changes to its service delivery, MMPP or otherwise, could have immediate and detrimental impact on methadone patients— an already extremely vulnerable patient population. This report will be used as a basis for discussion with stakeholders. It is important to consult on the issues that have been identified and proceed cautiously before implementing any new MMPP policy. Only following this dialogue, where stakeholders can also articulate their own concerns with the MMPP, can potential policy options be created and assessed before developing a made-in-BC solution to improving the MMPP and the care, quality, and health outcomes of its clients.

MBPSD will engage key stakeholders, such as the regulatory colleges, the BCPhA, the mental health and substance use community, patients, and the Doctors of BC, to discuss concerns respecting the MMPP and opportunities better foster a methadone dispensing environment which focuses more on patient care. This engagement is expected to begin in early in 2015.
11. Appendices

APPENDIX A:

Methadone Maintenance Controlled Prescription Form
APPENDIX B:

Methadone Maintenance Treatment in Australia, the U.K., and the U.S.

Australian Model

In Australia, MMT is offered through public and private specialty clinics, hospitals, community pharmacies and prison. Service delivery models vary across different states. For example, in New South Wales (NSW), services are focused generally towards induction and stabilization at a specialist clinic, with daily supervised dosing for a period of at least three months or once stabilized before transferring a client’s treatment to a community pharmacy. In contrast, treatment services in state of Victoria are primarily community-based with clients inducted directly onto treatment at a community pharmacy without a period of specialist support and stabilization.9899 In NSW and Victoria, dosing nurses have been dispensing methadone in clinics since the 1980s to meet the high demand for MMT services.100

The Australian national Government funds the cost of methadone itself but not the cost associated with dispensing the drug. State and territory governments cover this cost in correctional facilities and public clinics and for high-risk groups, such as juveniles and pregnant women.101 In private clinics and community pharmacies, clients are charged a fee, typically $5 per day. Pharmacies will extend credit to patients but often report difficulties in collecting accumulated debts. Non-payment of dispensing fees is a common reason for refusing to dose a client or terminating a client’s treatment, particularly in Victoria, where free treatment at public clinics is largely unavailable. Patients on MMT often experience significant financial hardship as treatment costs can exceed 15 percent of total income. 102

State/Territory governments subsidise service providers in some instances; however the models vary. For example, the NSW Government pays a once-only incentive payment to pharmacies new to supplying pharmacotherapy and pays pharmacies ongoing incentives for continuous clients. The Australia Capital Territory (ACT) Government subsidises community pharmacies to the value of $20 per week per client. The Tasmanian Government also provides incentive payments to pharmacists103. Often this funding is only to incentivise the pharmacist supplying methadone; and none of this funding reduces the fee for the client.

98 Winstock, Lea, and Sheridan, “Problems Experienced by Community Pharmacists Delivering Opioid Substitution Treatment in New South Wales and Victoria, Australia.”
99 Fraser and Treloar, Methadone Maintenance Treatment in New South Wales and Victoria.
100 Berbatis, Sunderland, and Bulsara, “The Services Provided by Community Pharmacists to Prevent, Minimise and Manage Drug Misuse: An International Perspective.”
101 Feyer et al., A National Funding Model for Pharmacotherapy Treatment for Opioid Dependence in Community Pharmacy.
102 Chaar et al., “Factors Influencing Pharmacy Services in Opioid Substitution Treatment.”
103 Chalmers and Ritter, “Subsidising Patient Dispensing Fees.”
Publicly-funded specialist clinics tend to be more costly to run than pharmacy-based services, where the patient is charged a dispensing fee. Many specialist clinics have reached operational capacity, have long waiting lists of candidate patients and are geographically distant from patients. Stabilized patients may stay on in the public clinics to avoid paying the dispensing fees even though they do not need the expensive specialist support. Compared with public specialist clinics, community pharmacy-based methadone programmes have significantly higher retention of methadone patients.

Only 40 percent of community pharmacies are providing MMT and other opioid substitution therapy resulting in an unmet demand for pharmacy-based dosing; only 43 percent of MMT patients are dosed in the community pharmacy setting. Barriers to methadone dispensing cited by pharmacies include concerns about financial impact, debts and disruptive behaviour by clients. Improved remuneration for pharmacies may increase pharmacy participation as suggested by Feyer’s funding model, where the government paid a proportion of the weekly pharmacy dispensing fee for patients. The study alleviated debt, and improved client retention and pharmacists’ satisfaction. While the pharmacist incentive of $15 per client per week did not cover the costs of providing the service (averaged at $20.28 per occasion of service), it improved pharmacist satisfaction significantly. Further complicating the pharmacy capacity issue is the documented imbalance of client distribution where some pharmacies are overloaded while others clientless. This is concerning because there is an inverse relationship between the quality of outcomes of the service and the number of patients per pharmacy.

Consumers reported high levels of satisfaction with pharmacy services but claimed they were “treated differently” (made to wait longer than other pharmacy clients) and expressed dissatisfaction about the quality of privacy afforded them.

**United Kingdom Model**

In UK, MMT initiation and maintenance is available in various settings including specialised treatment centres, residential care and community GPs. Community prescribing is carried out in

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104 Chaar, Hanrahan, and Day, “Provision of Opioid Substitution Therapy Services in Australian Pharmacies.”

105 Chalmers and Ritter, “Subsidising Patient Dispensing Fees.”

106 Berbatis, Sunderland, and Bulsara, “The Services Provided by Community Pharmacists to Prevent, Minimise and Manage Drug Misuse: An International Perspective.”

107 Chaar et al., “Factors Influencing Pharmacy Services in Opioid Substitution Treatment.”

108 Winstock, Lea, and Sheridan, “Problems Experienced by Community Pharmacists Delivering Opioid Substitution Treatment in New South Wales and Victoria, Australia.”

109 Feyer et al., *A National Funding Model for Pharmacotherapy Treatment for Opioid Dependence in Community Pharmacy.*

110 Ibid.

111 Winstock, Lea, and Sheridan, “Problems Experienced by Community Pharmacists Delivering Opioid Substitution Treatment in New South Wales and Victoria, Australia.”

112 Lea, Sheridan, and Winstock, “Consumer Satisfaction with Opioid Treatment Services at Community Pharmacies in Australia.”
specialist multidisciplinary teams or by general practitioners in shared care with specialist services which are usually multidisciplinary and resourced to offer specialist treatment and referral.

In the shared care model, the care of the patient is shared between the specialty service and the general practitioner. The specialist service assesses the patient, initiates treatment with methadone where appropriate and then returns the patient to his or her GP for ongoing care – or finds GPs for patients without one. After initial stabilisation, the GPs prescribe doses negotiated by the specialist service and manage the patients’ overall health.

The specialist service offers regular counselling and drug screening to the patient and provides consultation support to the GP, especially for difficult to manage patients. Most shared care schemes follow the principle that patients with lower needs are seen in primary care and those with more complex problems are moved to secondary care. The shared care model - where primary care physicians are supported by a specialist support system and pharmacies in caring for patients – depends on having enough specialist capacity. In places lacking access to specialist support, counselling and other services, GP led services have reported comparable outcomes to the shared care model.

Irrespective of who sees the patients for ongoing review, patients almost always receive their prescribed medication from a community pharmacy – there is minimal dispensing in other settings. Valid prescriptions can be dispensed at any registered community pharmacy. Initially, methadone was mostly prescribed as take-home doses until the UK Department of Health issued guidelines in 1999, recommending daily supervision for the first three months. In England, the standard is to provide supervised consumption for approximately three months, while Scottish practice generally involves prolonged supervision.

The UK service delivery model, particularly Scotland, is characterised by well-developed pharmacy protocols and close collaboration between prescribers and pharmacies. Prescribers consult a list of pharmacies taking new patients and communicate directly with the preferred pharmacy. Terms of agreement set up between the specialist service, prescriber, pharmacist, and patient are widely used to agree on the service, roles and expectations of all parties – and in particular, acceptable patient behaviour and consequences of non-compliance. GPs and pharmacists are strongly encouraged to communicate with each other about the patient’s condition. The UK model, underpinned by Best Practice Guidelines, provides ongoing support guidance to pharmacists on patient education, conflict management and prescriber communication.

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113 Day et al., “Characteristics of Drug-using Patients and Treatment Provided in Primary and Secondary Settings.”
114 Keen et al., “Does Methadone Maintenance Treatment Based on the New National Guidelines Work in a Primary Care Setting?”
115 Roberts and Hunter, “A Comprehensive System of Pharmaceutical Care for Drug Misusers.”
116 Gruer and Roberts, “New Approaches to Dispensing Controlled Drugs: Supervised Consumption of Methadone.”
117 Walker, Best Practice Guidance for Commissioners and Providers of Pharmaceutical Services for Drug Users.
In the UK, the remuneration model is complex because some components are negotiated nationally by the UK Pharmaceutical Services Negotiating Committee while others are determined separately in a system of local budgets and contracts. The fee therefore will vary depending on the locality. Pharmacies claim an “item level” fee payable once per prescription. For each interaction with the patient or “pick-up”, pharmacies receive a professional fee (dispensing fee), controlled drug fee, the consumables allowance, container allowance (if appropriate) and any relevant volume related fees. The supervision fee is set locally, payable when medication consumption is supervised within the dispensing pharmacy for the participants on the daily supervised consumption regimen. Another model, tried in some localities, is the capitation system where pharmacies receive a set fee for each patient for 12 months.

**United States Model**

Access to methadone is more restricted in the United States than elsewhere in the developed world. Methadone may be prescribed and dispensed only through specially licensed methadone maintenance treatment programs (MMTPs) and a small number of office-based physicians who apply for special exemptions. Buprenorphine is the only opioid substitution treatment that qualified physicians can prescribe in office-based settings.

The framework of intense federal and state regulations is intended to prevent its illicit sale and to ensure that counseling is provided along with pharmacotherapy. New clients are required to attend MMTPs daily for supervised methadone dosing, receiving take-home doses only after demonstrating stability and safe methadone handling. Even extremely stable patients, however, are required by federal and state regulations to visit their MMTP much more frequently than is considered necessary for patients receiving care for other chronic medical conditions.

Due to the restrictive regulations on methadone prescribing, the integration of MMT with primary care has been limited to a few investigational studies where physicians have obtained federal approval to pilot a model of methadone treatment based in a private office setting rather than an MMTP. In this model, stable patients receive a monthly supply of methadone in an office setting in contrast to more highly regulated settings where daily observed dosing is the norm. These programmes demonstrated that office-based treatment is effective for a substantial proportion of selected patients (50–80 percent) and the results have been comparable or superior to those seen...

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118 “Supervised Consumption - Telford & Wrekin CCG.”
119 Walker, “Shared Care for Opiate Substance Misusers in Berkshire.”
120 European Monitoring Centre for Drugs and Drug Addiction, “Substitution Treatment - Treatment Regimes.”
121 Nosyk et al., “A Call For Evidence-Based Medical Treatment Of Opioid Dependence In The United States And Canada.”
122 Harris Jr et al., “A 5-Year Evaluation of a Methadone Medical Maintenance Program.”
in usual care in methadone clinics. In most office-based programs, physicians distribute the methadone directly from their offices without pharmacy involvement but one study demonstrated the feasibility of office-based prescribing in conjunction with community pharmacy dispensing.

Early MMT programs treated patients at little or no cost but as a result of cutbacks to publicly funded treatment programs in the 1980s, most methadone programs are now privately owned. These rely on out-of-pocket payments by patients and failure to pay these costs is an important reason why treatment is discontinued. Only 12 states (24 percent) provide third-party public reimbursement (Medicaid) for MMT.

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124 Salsitz et al., “Methadone Medical Maintenance (MMM).”
125 Tuchman et al., “Safety, Efficacy, and Feasibility of Office-Based Prescribing and Community Pharmacy Dispensing of Methadone.”
127 McCarty, Frank, and Denmead, “Methadone Maintenance and State Medicaid Managed Care Programs.”
### APPENDIX C:

#### Pharmacy Reimbursement for Methadone Maintenance in Canada

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Dispensing Fee</th>
<th>Interaction Fee</th>
<th>Maximum Professional Fees Per Patient Per Week</th>
<th>Note</th>
</tr>
</thead>
</table>
| Non Insured Health Benefits   | $10.00         | $4.60           | $42.21                                        | • Only one dispensing fee per week  
• Total $6.03 daily fee: ($10.00 dispensing fee/7 days + 4.60) |
| British Columbia             | $10.00         | $7.70           | $123.90                                       | • Daily dispensing fee |
| Alberta                      | $12.30         |                 | $86.10                                        | • Only one dispensing fee per week  
• Alberta is listing Methadose® for MMT. Where methadone has to be used for MMT, a compound can be reimbursed in some cases for a $18.45 dispensing fee |
| Saskatchewan                 | $11.25         | $3.50           | $35.70                                        | • Only one dispensing fee per week  
• Total $5.10 daily fee ($11.25 dispensing fee/7 days + 3.50)  
• Max interaction fees is $24.50 per week  
• Compounding fee-$0.75/minute to a maximum of 60 minutes. Maximum of 20 minutes applies to most methadone compounds |
| Manitoba                     | $6.95          |                 | $48.65                                        | • Daily dispensing fee  
• Reviewing program and may change witnessing, days’ supply elements |
| Ontario                      | $8.83          |                 | $61.81                                        | • Daily dispensing fee  
• Claims for individual carry doses must be submitted on the dispensing date.  
• Pharmacist cannot charge a co-
<table>
<thead>
<tr>
<th>Province</th>
<th>Fee Details</th>
<th>Average Fee</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quebec</td>
<td>$14.26 for pharmacies dispensing 48,500 prescriptions per year; $13.26 for over 48,500 prescriptions</td>
<td>$92.82-$99.82</td>
<td>• Only one fee per patient per day.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Carries are considered a multiple-day supply for which a single fee applies.</td>
</tr>
<tr>
<td>New Brunswick</td>
<td>$10.40</td>
<td>$72.80</td>
<td>• Daily dispensing fee</td>
</tr>
<tr>
<td>Nova Scotia</td>
<td>$11.05</td>
<td>$77.35</td>
<td>• Daily dispensing fee</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Flat compounding fee of $11.05 for methadone</td>
</tr>
<tr>
<td>Prince Edward Island</td>
<td>$12.18</td>
<td>$85.26</td>
<td>• Daily dispensing fee</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Only one dispensing fee applies for carries.</td>
</tr>
<tr>
<td>Newfoundland</td>
<td>$10.90</td>
<td>$76.30</td>
<td>• Daily dispensing fee</td>
</tr>
<tr>
<td>Yukon</td>
<td>$8.75</td>
<td>$61.25</td>
<td>• Daily dispensing fee</td>
</tr>
</tbody>
</table>
APPENDIX D

Government Response to CARBC Review

Response from the B.C. Government

RE: Methadone Maintenance Treatment in British Columbia, 1996-2008: Analysis and Recommendations

The Ministry of Healthy Living and Sport (MHLS) thanks the Centre for Addictions Research of BC (CARBC), University of Victoria, and its partner organization, the Centre for Health Evaluation and Outcome Sciences (CHEOS), University of British Columbia, for their work in reviewing B.C.’s methadone maintenance treatment (MMT) program and preparing the report, Methadone Maintenance Treatment in British Columbia, 1996-2008: Analysis and Recommendations. This report was commissioned by MHLS to assist in its goal of improved health and wellness for all British Columbians.

The CARBC report’s analysis and recommendations are welcome, as the Province has a commitment to providing evidence-based health services. The World Health Organization and UNAIDS have identified well-functioning opioid substitution programs as essential for engaging vulnerable injection drug users in efforts to reduce and prevent the spread of HIV/AIDS. The Province’s methadone program is a key pathway to care for BC’s $48 million Seek and Treat to Prevent HIV project, which is piloting the HIV treatment as a prevention concept in two real world settings -- Prince George and Vancouver’s Downtown Eastside. The four-year pilot is reaching and offering comprehensive care to individuals not previously engaged in HIV treatment, and tracking outcomes at both the individual and population level, across treatment, prevention and cost-effectiveness domains.

People with opioid addictions who receive optimal MMT are retained in treatment longer, are less likely to transmit blood-borne pathogens, and are less likely to use illegal drugs and engage in criminal activity. This benefits both individuals and society by improving health and public safety.

The MHLS is working with other ministries, including Health Services (MoHS) and Housing and Social Development (MHSD), to study and learn from the CARBC report’s findings and recommendations.

Even while the review was underway between 2008 and 2010, government, health authorities and other key health system partners have taken some important steps towards improving MMT in BC. Examples of such initiatives include:
• Improving the health of vulnerable, opioid-dependent British Columbians by including MMT as a key strategy for reducing risky patterns of substance use in the model core public health program, Prevention of Harms Associated with Substance Use;

• Improving the care that vulnerable British Columbians receive through improved knowledge and practices of health care professionals involved in MMT, by making it an area of focus for knowledge exchange activities undertaken as part of BC’s Drug Treatment Funding Program (funded by Health Canada). For example, the MoHS will work with relevant partners to develop a specialized training module on methadone maintenance as part of the Core Addictions Practice Training to ensure that adequate training is available for direct and contracted substance use and mental health staff as well as affiliated agencies to increase their capacity to serve people receiving methadone maintenance treatment;

• Improving the care that vulnerable British Columbians receive from their MMT physicians, with a revised edition of the College of Physicians and Surgeons of BC’s Methadone Maintenance Handbook, which incorporates a strong population health focus and reflects recent evidence on best practices for MMT;

• Improving the care that vulnerable British Columbians receive from their methadone-dispensing pharmacists, with updated policies and guidelines on MMT from the College of Pharmacists of BC;

• Reducing the costs to British Columbians of one aspect of the MMT program, through a Frequency of Dispensing policy implemented by Pharmacare in 2009. Under the policy, PharmaCare limits the number of fees it pays to pharmacies that dispense medication, including methadone, to patients on a daily basis to three dispensing fees per patient per day. This policy has made it less lucrative for pharmacies to fill prescriptions for methadone patients who may also be using multiple prescription drugs for other conditions;

• Improving the care that vulnerable British Columbians receive from their MMT physicians and reducing one associated cost, through the introduction of point-of-care urine screening. This policy allows physicians to more easily monitor the illegal drug use of their patients and to do so at a lower cost than traditional laboratory-based urine screening;

• Improving access to evidence-based treatments to vulnerable British Columbians living in isolated rural parts of the province, by authorizing billing for MMT care via tele-health; and

• Developing a model to ensure the health and safety of individuals in mental health and addiction assisted living residences, including where residents receive methadone maintenance treatment, through the planned registration of those residences by the Office of the Assisted Living Registrar and the setting of provincial health and safety standards.
In addition:

- The MoHS is leading a strategic initiative on the integration of primary and community health care which includes mental health and substance use services, pharmaceutical services and home and community care to better meet the needs of people living with chronic illnesses, substance use and/or mental health issues. This initiative is a collaborative effort of the health authorities, the BC Medical Association, community organizations, patients and the ministry to provide effective and efficient integrated care in the community to avoid inappropriate use of emergency and acute care services. Opportunities to better support people receiving or requiring methadone maintenance treatment will be explored through this initiative.

- The MHSD will participate in conversations with the MoHS and M HLS focused on ensuring that our mutual clients have access to appropriate supports for addictions treatment; and

- The MoHS will take the lead for consideration of a coordinated approach to MMT delivery in BC. Within the priorities established and resources available, the approach will explore means to address gaps related to responsibility and accountability across components of the system.

The M HLS thanks CARBC for its work on the MMT review and looks forward to working with other government ministries, health authorities, and other health system partners to ensure MMT is part of a comprehensive array of evidence-based mental health and substance use services, supported by effective alignment and integration with primary health care and community care services.

Andrew Hazlewood  
Assistant Deputy Minister  
Population and Public Health, M HLS

Heather Davidson  
Assistant Deputy Minister  
Health Authorities Division, MoHS

September 1, 2010  
Date

September 2, 2010  
Date
Bob Nakagawa  
Assistant Deputy Minister  
Pharmaceutical Services Division, MoHS  

Molly Harrington  
Assistant Deputy Minister  
Policy and Research, MHSD  

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Chief Administrative Officer, MoHS  

Sheila Taylor  
Assistant Deputy Minister  
Medical Services, MoHS  

Dr. Perry Kendall  
Provincial Health Officer  

September 2, 2010  
Date

September 2, 2010  
Date

September 2, 2010  
Date

September 1, 2010  
Date