Opioid Overdoses in Supportive Housing Facilities: How to Keep People Safe

by

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Ethics Statement

The author, whose name appears on the title page of this work, has obtained, for the research described in this work, either:

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Abstract

Supportive housing facilities are a high-risk environment for opioid overdose fatalities and have been identified as an area where overdose prevention and response efforts are crucial. To help understand the context and dynamics of opioid overdoses in supportive housing, and identify and evaluate potential policies, qualitative interviews and focus groups were conducted. Research participants included frontline supportive housing staff and managers, health professionals, a coroner, and several clients from one supportive housing agency in Vancouver. A range of policies aimed at reducing the risk of fatal opioid overdoses in supportive housing settings were identified and evaluated using a multiple-criteria analysis. The evaluation criteria included: effectiveness, stakeholder involvement, budget, and implementation time. Based on this analysis, it is recommended that all frontline supportive housing staff receive annual opioid overdose prevention and response training, and that supportive housing agencies develop and implement opioid overdose intervention protocols for their unique settings.

Keywords: Overdose; Opioid; Opiate; Supportive Housing; Housing First; Naloxone; Harm Reduction
Dedication

To my friends and family, this research is dedicated to you. Especially:

My sister Erin, who planted the very seed of returning to school in the first place; my loving parents, who have always been my safety net and an endless supply of encouragement; my partner Richard, who has been unconditionally supportive (and somehow kept me dancing) through all of this; and my beautiful Pender family who, in each of your own unique ways, always helped keep my spirits up.
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Harm Reduction Colleagues from: San Francisco and the Bay, Area but especially the Mission Neighborhood Resource Center; all the inspiring people I have met at Harm Reduction and Drug Policy conferences over the years; BC Centre for Disease Control (BCCDC); Vancouver Coastal Health (VCH); Portland Hotel Society; Canadian Drug Policy Coalition (CDPC); Fraser Health (FH), and all my co-workers at Insite, I learned so much from all of you.

School of Public Policy: All of my professors and classmates and those who supported me to jump through the endless hoops!

Interviewees: You kindly donated your time to speak with me and shared your passion for creating safe places for people to live.

Lastly, I would especially like to thank Donald McPherson, Sara Young, and Kora DeBeck. Donald, your commitment to the world of drug policy and harm reduction is truly inspiring. You have shown me that it’s possible to create my own space in this world while fighting for social justice, but without losing my sense of humour. Sara, by accepting me as your co-op student at VCH, you provided me with unparalleled opportunities to learn. Not only by being directly involved in your projects, but also by following your great example. Kora, your invaluable guidance and feedback during the capstone process enhanced my focus and productivity, and challenged me in ways I never thought possible. It was a difficult journey, just as you said it would be. But I could not have asked for a greater advisor or teacher. Thank you for your knowledge, your patience, and continually pushing me to be the very best version of me.

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## List of Acronyms

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<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>AED</td>
<td>Automated External Defibrillators</td>
</tr>
<tr>
<td>BC</td>
<td>British Columbia</td>
</tr>
<tr>
<td>BCCDC</td>
<td>British Columbia Centre for Disease Control</td>
</tr>
<tr>
<td>Bill C-2</td>
<td>The Respect for Communities Act</td>
</tr>
<tr>
<td>BCCFE</td>
<td>British Columbia Centre for Excellence in HIV/AIDs</td>
</tr>
<tr>
<td>DTES</td>
<td>Downtown Eastside</td>
</tr>
<tr>
<td>FDA</td>
<td>Federal Drug Administration</td>
</tr>
<tr>
<td>MD</td>
<td>Medical Doctor</td>
</tr>
<tr>
<td>MHO</td>
<td>Medical Health Officer</td>
</tr>
<tr>
<td>OST</td>
<td>Opioid Substitution Therapy</td>
</tr>
<tr>
<td>NARPA</td>
<td>National Association of Pharmacy Regulatory Authorities</td>
</tr>
<tr>
<td>PSA</td>
<td>Peer Service Advocate</td>
</tr>
<tr>
<td>PHS</td>
<td>Portland Hotel Society</td>
</tr>
<tr>
<td>PHSA</td>
<td>Provincial Health Services Authority</td>
</tr>
<tr>
<td>PWID</td>
<td>Persons Who Inject Drugs (often seen used interchangeably with IDU 'Injection Drug Users')</td>
</tr>
<tr>
<td>PWUD</td>
<td>Persons Who Use Drugs (not specific to route of administration). This applies to any person who uses illicit drugs.</td>
</tr>
<tr>
<td>PWUO</td>
<td>Persons Who Use Opioids - This applies to individuals who use licit and illicit opioids, as well as all possible routes of administration: oral, inhalation, insufflation, topical or injection.</td>
</tr>
<tr>
<td>RN</td>
<td>Registered Nurse</td>
</tr>
<tr>
<td>RTA</td>
<td>Residential Tenancy Act</td>
</tr>
<tr>
<td>SIF</td>
<td>Supervised Injection Facility</td>
</tr>
<tr>
<td>SRO</td>
<td>Single Resident Occupancy (hotels)</td>
</tr>
<tr>
<td>THN</td>
<td>Take Home Naloxone</td>
</tr>
<tr>
<td>UBC</td>
<td>University of British Columbia</td>
</tr>
<tr>
<td>VCH</td>
<td>Vancouver Coastal Health</td>
</tr>
<tr>
<td>VANDU</td>
<td>Vancouver Area Network of Drug Users</td>
</tr>
<tr>
<td><strong>Glossary</strong></td>
<td></td>
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<tr>
<td>----------------</td>
<td></td>
</tr>
<tr>
<td><strong>Client</strong></td>
<td>This term will be used to describe any person receiving services of supportive housing, drop-ins or emergency shelters.</td>
</tr>
<tr>
<td><strong>Fentanyl</strong></td>
<td>A highly potent synthetic opioid.</td>
</tr>
<tr>
<td><strong>Frontline housing staff</strong></td>
<td>Any non-medical housing staff that has regular contact with clients. This could be a housing support worker, custodial, or housekeeping staff.</td>
</tr>
<tr>
<td><strong>Harm Reduction</strong></td>
<td>Practical strategies to help reduce the risk or the extent of harm from a specific activity (often refers to drug use or sexual behavior).</td>
</tr>
<tr>
<td><strong>Housing First</strong></td>
<td>Low barrier housing which offers support services based on harm reduction principles.</td>
</tr>
<tr>
<td><strong>Low barrier</strong></td>
<td>Refers to social services which have fewer requirements for participation.</td>
</tr>
<tr>
<td><strong>Illicit</strong></td>
<td>Illegal drugs or illegal use of legal drugs.</td>
</tr>
<tr>
<td><strong>Licit</strong></td>
<td>Legal drugs.</td>
</tr>
<tr>
<td><strong>Insufflation</strong></td>
<td>Route of drug administration; inhaling via the nares. Other more commonly used term is ‘snort’.</td>
</tr>
<tr>
<td><strong>Methadone</strong></td>
<td>A prescription opioid replacement therapy; in addiction medicine it is used to replace illicit opioid use.</td>
</tr>
<tr>
<td><strong>Naloxone/Narcan</strong></td>
<td>An opioid blocker which can temporarily stop the effects of an opioid. Used in situations of suspected opioid overdose.</td>
</tr>
<tr>
<td><strong>Opiates</strong></td>
<td>Drugs derived from compounds found naturally in the opium poppy; used for pain control. e.g. morphine and codeine.</td>
</tr>
<tr>
<td><strong>Opioid</strong></td>
<td>A catch-all phrase for all drugs with opium like effects (pain control) as it refers to both opiates and synthetic substances.</td>
</tr>
<tr>
<td><strong>Overdose</strong></td>
<td>Used to describe the excessive dose of a substance beyond the therapeutic or recommended dosage, which can lead to morbidity and mortality.</td>
</tr>
<tr>
<td><strong>The Respect for Communities Act</strong></td>
<td>Canada legislation which adds an onerous administrative burden for Insite and any new SIF applicants; has potential to prevent new facilities from opening across the country.</td>
</tr>
<tr>
<td><strong>Supervised Injection Facility (SIF)</strong></td>
<td>Designed to minimize injection drug related harm. Often a RN and peer run health centre, where PWID can go and inject previously obtained drugs.</td>
</tr>
<tr>
<td><strong>Stigma</strong></td>
<td>A negative stereotype.</td>
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</table>
Supportive Housing Defined as a combination of housing and services intended to help people live more stable, productive lives. Supportive housing is intended for people who face the most complex challenges (i.e. people who were formerly homeless or incarcerated; people with mental health and substance use issues; and people with disabilities, etc.). This research will be looking specifically at the setting of multi-unit buildings.

Take Home Naloxone (THN) kits Opioid overdose reversal kit which contain 3 vials/ampoules of naloxone, 3 intramuscular needles, 1 breathing mask, 1 set of latex gloves, alcohol swabs, and the Overdose Response Info Form (to be completed after naloxone is used and then sent to the BCCDC).
Executive Summary

There is a momentum of interest in understanding how the relations between individuals and environments impact on the production and reduction of drug harms.

Risk Environments (2009, 193)

Policy problem and research objectives

The rise in fatal overdose from licit and illicit drugs has presented a serious public health concern since 2011, as identified by the Office of the Chief Corner in BC. The BC Drug Alert Partnership has taken the lead in recent years to address the numerous causes and solutions for these drug overdose fatalities. To date, the potential role of supportive housing to address this problem has not been explored. This study focuses on how to address this gap. Supportive housing can be a high risk environment for opioid overdose fatalities but it can also be a solution to opioid overdose fatalities with defined prevention and response strategies.

Earlier investigations into best practices for effective management of fatal opioid overdose in supportive housing are limited. As a result, specific strategies to prevent or reverse fatal opioid overdoses in this setting have been neglected by policy makers. Research and literature related to opioid use with respect to supportive housing and mortality were reviewed to conclude that drug use and overdoses are an issue in supportive housing, but quantitative publicly-available data are lacking. However, a few studies stand out as evidence for immediate intervention in this problem area. One of these studies focused on one year (2003) of coroner reports in London England. The result of this study produced a tool called the Housing Opiate Risk Overdose Risk Assessment Tool (HOORAT) (Flemen, 2010). This tool has proved useful at decreasing fatalities in the United Kingdom by identifying opioid users in supportive housing. In addition, a recent research project conducted by the University of British Columbia (UBC) and the local health authorities in the Vancouver metropolitan area investigates the effects of providing non-medical frontline staff at a supportive housing agency with opioid overdose training and naloxone.
Interviews and focus groups

The purpose of this research is to inform supportive housing policy with the goal of preventing client opioid overdose fatalities. Key characteristics of several agencies' current unofficial strategies were examined to identify practices that could contribute to official policy changes. Two methodologies were used to identify current practice and possible solutions. The first method of data collection was focus groups, which included fourteen clients from one supportive housing agency. Qualitative interviews with key informants were also used to collect data. These interview participants included supportive housing frontline staff and managers, affiliate health workers, a coroner, and a researcher. Twelve initial interviews were conducted, followed by nine follow up interviews. The follow up interviews allowed the author to obtain feedback on the five potential policy options. The findings of the analysis demonstrated that there is plenty of momentum to address this issue. A systemic and organized effort is needed, however, to make policy changes that will reach the greatest number of persons who use opioids (PWUO) and reside in supportive housing.

Policy options

Based on the literature review and research findings, five polices were developed with the primary goal of reducing fatalities in supportive housing. Of the five policies, one is determined to be essential, while the other four are optional and will be evaluated against each other to determine the best solution to the problem. These four policies will be evaluated against four criteria: effectiveness, stakeholder involvement, budget, and implementation time. The effectiveness criterion addresses four separate measures: reach; awareness of event; responding to an overdose; and prevention. The stakeholder criterion addresses two measures: clients and frontline staff. Budget and implementation time each address one measure: dollars and months, respectively.

*The Opioid Overdose Prevention and Response Training* is the recommended required policy. This policy is required given that it is essential for frontline staff to have confidence in recognizing and responding to opioid overdoses. These skills are not location-specific but can be universally applied. The remaining optional four policies will be evaluated against each other (listed in no particular order).
The first policy option, *Opioid Overdose Intervention Protocol* for supportive housing agencies would implement and standardize opioid overdose protocols that include a role for clients in all agencies. The next policy option, to *Increase Access to Naloxone*, focuses on having naloxone available for any person in a supportive housing facility 24-hours a day. The third policy option is a *Supervised Room*. Through this policy, clients notify frontline staff and/or peer staff when and where drug use will occur; the staff team can check-in with clients post-use and provide a supervised room for monitoring if it is needed. The fourth and final policy option that will be considered is a *Supervised Injection Room*, where clients will be able to inject opioids under the supervision of a registered nurse (RN), frontline staff, and/or client-staff.

**Recommendations**

Based on the analysis, *The Opioid Overdose Prevention and Response Training* policy is determined to be mandated, as it is a crucial component of a supportive housing opioid overdose intervention strategy to prevent fatalities. This policy is applicable to any setting, and therefore needs to be paired with one of the four setting-specific policies. The recommended policy with the highest score of the four options is *The Opioid Overdose Intervention Protocol*; however, this policy scores the lowest with two of the evaluation criterion: awareness of overdose events, and responding to overdoses. Combining this policy with the *Increase Access to Naloxone* and the *Supervised Room* policy will address both these measures, and together these three policies will be the most effective solution to the problem of fatal opioid overdoses in supportive housing.
Chapter 1.

Introduction

*The creation of safer environments goes beyond safer use by individuals to a focus on determinants of the harms of drug use including drug policy, policing, income and housing policies.*

Pauly et al., (2013, 285)

Since its peak in 1998, accidental opioid overdoses are again on the rise in British Columbia (BC). This study focuses on the province of BC, but opioid overdose mortality is a current public health issue across Canada. The study, *Determinants of overdose incidents among illicit opioid users in 5 Canadian cities* (Fischer et al., 2004), describes a catastrophic jump in opioid overdose deaths in BC from 39 per year in 1988 to 370 in 1998. The number of overdose fatalities in BC has continued to rise, with 465 opioid overdose deaths recorded in BC in 2015 (Illicit Drug, 2015). Fentanyl (a potent pharmaceutical opioid) alone was present in 13 deaths in 2012 and 90 in 2014 (CCENDU Bulletin, 2015). Although the majority of fentanyl-related deaths in BC involved mixing other illicit drugs, the role of fentanyl in the increase of overdose deaths in BC remains unknown (CCENDU Bulletin, 2015).

In response to the first spike in fatal overdoses in Vancouver, BC in the 1990s, harm reduction measures were introduced that were initially effective at reducing mortality. These measures included needle exchange programs, increasing opioid substitution therapy (OST), and the opening of a supervised injection facility (SIF) in 2003 (Insite – Supervised, n.d). Given the current overdose epidemic, it is clear that these efforts have not been enough to address the needs of at risk persons who use opioids (PWUO). In particular, Fischer et al. (2004) identified supportive housing facilities as an area for further development of overdose prevention measures. This study will examine the many factors
that put PWUOs at risk of an overdose in supportive housing environments and examine measures that can minimize those risks and keep PWUOs alive.

This analysis focuses on supportive housing facilities as the built/physical environment. Supportive housing can be described as a combination of support services and housing to assist people with complex challenges (e.g. substance use and mental health issues, formerly homeless). According to a BC coroner interviewee, accidental death (often due to opioid overdoses) is a problem in both supportive and unregulated single resident occupancies (SRO). Hembree et al. (2005) also identified an increased risk of overdose in unregulated SROs. Homeless and marginally housed people with substance and mental health issues comprise the majority of candidates for supportive housing in BC (Housing and Harm Reduction, 2009). According to Vancouver Coastal Health’s (VCH) Supportive Housing Strategy (2007), there are three categories of supportive housing stock: mental health supported housing (for people in mental health treatment); addictions supported housing (for people in recovery from substance use issues); and low barrier housing (for people not engaged in treatment or abstinence from substances). The definition of low barrier housing openly acknowledges that clients do not have to change their substance use behaviors in order to receive housing. Given the prevalence of active substance use in these setting, this analysis focuses on opioid overdose interventions in low barrier housing.

Supportive housing agencies are not required to have a protocol for opioid overdose interventions since no government authority determined that this is necessary. According to Oudshoorn (2014), however, there are many unanticipated deaths that happen in these environments due to the vulnerability of newly housed people who deal with chronic addictions. Oudshoorn (2014) does not attribute high mortality rates only to individual behavior, and he is not alone in this sentiment. Rhodes (2002) encourages policy makers to shift their understanding of responsibility for harm to the surrounding environment, instead of solely locating blame with the individual. Although transitioning homeless persons who use drugs (PWUD) to supportive low barrier housing is widely accepted as a mechanism to improve health outcomes, this transition has been identified as a period of heightened risk for fatal overdose events. Why is it that a new housing placement is associated with a greater risk of opioid overdose among formerly homeless people? Oudshoorn (2014) explains that when a homeless person
overdoses it is typically in a public outdoor space or an emergency shelter where the overdose has a greater chance of being witnessed and life-saving interventions being quickly implemented. Once housed, however, PWUD are able to consume drugs in privacy, such as alone in their room, which makes overdose recognition and response less likely, if not impossible. Consequently, supportive housing agencies must address opioid overdose risk factors related to the built environment in order to better support their opioid-using clients. If these risks are not addressed, accidental opioid overdose fatalities will continue.

The core research question guiding this analysis is: What are the best ways to prevent opioid overdoses in supportive housing facilities and save lives? Given this question, the purpose of this study is two-fold: to examine the context and dimensions of opioid overdoses in supportive housing facilities, as well as identify and evaluate possible interventions to reduce the risk of fatal overdoses in these settings. Ultimately, the researcher expects this study will be beneficial for supportive housing agencies, BC Housing, and local health authorities to better serve their opioid-using clients and prevent accidental overdoses.
1.1. Structure of the Capstone

This study begins by introducing the concept of supportive housing, the characteristics of people who live there, and how it is regulated. It then focuses on opioids, how they are used, risks involved, opioid access in Canada, and interventions that address harms related to opioid overdoses. Chapter 3 outlines the methodology of the research and the limitations of the data collection. Chapter 4 analyzes and describes the research findings concerning opioid overdoses in supportive housing, including the scope of the problem, which parties are responding to this issue, and the issues with the current response in the supportive housing setting. Chapter 5 defines five policies that were informed by the data collection. Chapter 6 describes the intended objectives of the five policies with reference to four different criteria. In Chapter 7, the policies are evaluated against the criteria and measures from Chapter 6. Chapter 8 describes the policy recommendations and concludes with future considerations.
Chapter 2.

Background and Literature Review

2.1. What is Supportive Low Barrier Housing?

Supportive low barrier housing is an umbrella term for two different models of housing, low barrier, and the continuum of care model. This research study focuses on low barrier housing and the term “supportive housing” refers to this model. It is important, however, to understand these two different models of supportive housing and their opposite approaches to address substance use. Low barrier housing is intended to be relatively easy to access and it does not require applicants to modify their substance use behavior in order to be granted housing. Conversely, the continuum of care model requires applicants to be in psychiatric or addiction treatment, follow curfew rules, and abstain from drugs and alcohol. With the continuum of care model, individuals start off in transitional housing and, if they are able to remain abstinent from substance use, they are eventually rewarded with permanent housing (Pauly et al., 2011; Greenwood et al., 2005). Clients who cannot meet the requirements of the continuum of care model either stay in transitional housing or lose their housing altogether. A growing body of research indicates, however, that housing should not be contingent on abstinence from substance use and engagement in addiction treatment (A Mental Health & Addictions, 2006; Greenwood et al., 2005; Pauly et al., 2011). The continuum of care model has been found to result in vulnerable persons who use drugs (PWUD) cycling through periods of homelessness when they are unable to meet the requirements for housing. In contrast, the low barrier housing model focuses on providing an opportunity for people with substance use issues to stabilize essential aspects of their lives and minimize health and social harms.

Low barrier housing offers support services based on harm reduction principles and can be referred to as a Housing First model. Housing First has been embraced in several Canadian cities including at least eight municipalities in BC (Housing Matters BC, 2014). There is a large body of research demonstrating the success of the Housing First model for stabilizing clients but there is minimal research on the impact of Housing First on substance use (Pauly et al., 2013). There is also minimal Housing First research
investigating efforts to prevent the morbidity and mortality of opioid overdoses in supportive housing settings. This research gap is the focus of this study.

2.2. Supportive Housing in BC: A Lack of Regulations

Supportive housing is still a relatively new concept in BC. As reported in Supportive Housing in Supportive Communities (1999) in 1997, 12 municipalities came together to form a steering committee to determine the role of the provincial and local governments with respect to supportive housing. At this time, only seniors were considered for supportive housing. In 2006, the province included homeless people as another population in need of supportive housing. Housing Matters BC (2014) states that in 2006 the province funded 16 homeless outreach teams to connect homeless people with permanent housing; this was increased to 60 teams in 2014.

BC Housing Management Commission (BC Housing) is a provincial crown corporation that partners with private and non-profit agencies, various levels of government, and health authorities to create affordable housing in BC (Housing Provider Kit, 2015). Among its many roles, BC Housing facilitates access to supportive housing services for seniors and homeless adults. The Community Care and Assisted Living Act regulate seniors’ services, while the Residential Tenancy Act regulates homeless services. The main purpose of the Community Care and Assisted Living Act is to provide licensing services for facilities that provide care for vulnerable people (Community Care, 2016); the Residential Tenancy Act does not have licensing services. The BC coroner interviewee also highlighted this difference between the two acts, where the Residential Tenancy Act and the Community Care Act have different regulators and licensing for supportive housing. Ultimately, they believed that supportive housing for marginally housed adults was a positive step, but regulations are needed to prevent untimely death, including drug overdose fatalities.

Health authorities play an additional role in supportive housing by funding both housing and health services. In Vancouver for example, the municipality works in partnership with Vancouver Coastal Health (VCH) to secure funding for support services (Supportive Housing Strategy, 2007). VCH also has contracts with several supportive
housing agencies that are separate from those agencies that have contracts with the province (BC Housing).

2.3. Minimizing the Harms of Opioids

Persons who use opioids (PWUO), licit (legal) or illicit (illegal), are at high risk of overdose due to many factors. As described by White et al. (1999), the respiratory depressant effect that leads to hypoxia (absence of oxygen) is the lethal characteristic of this family of drugs. Numerous factors are associated with an increased risk of overdose among PWUO, such as using alone, mixing with alcohol or other drugs, using after periods of abstinence, a lack of overdose prevention knowledge, starting or reducing opioid substitution therapy (OST), the absence of primary care when prescription opioids are no longer available (Opioid Overdose Prevention, 2013), and a recent non-fatal overdose event (Mole, 2015). PWUO and people who use illicit stimulants are also exposed to an additional overdose risk; higher potency opioids, such as fentanyl, are increasingly hidden in both opioids and stimulants (Amlani et al., 2015a). Fortunately, the dangers of an opioid overdose can be mitigated with a number of different harm reduction strategies.

2.3.1. Individual Harm Reduction Strategies for People Who Use Opioids

Harm reduction in the micro-environment focuses on an individual’s behavior. It is an approach that acknowledges a risk of harm resulting from specific activities (in this case drug use), but individuals can use strategies to reduce the risk or the extent of harm from that activity (Harm Reduction Coalition, n.d.). The elements in the micro-environment that have the potential for causing harm are also referred to as ‘risk factors’ (Moore, 2004). For example, using drugs alone is a major risk factor that may result in a fatal overdose. An example of a harm reduction strategy aimed at mitigating this risk factor is, ‘do not use alone.’ When a person uses alone there is no one there to intervene and save his or her life if an overdose occurs. Polydrug use (combining several drugs together) is another risky behavior that can lead to an overdose, as combining substances can have unknown effects (Amlani et al., 2015a). Harm reduction strategies to mitigate this risk include
staggering substance use, or not mixing substances. These are just two examples of risk factors coupled with harm reduction strategies.

Harm reduction strategies are often focused on an individual’s ability to modify their behavior, however, individual behavior is unpredictable and often varies depending on the situation. Moore (2004) describes harm reduction inaction when he states, “despite the high levels of awareness of overdose risk factors, and the partial adoption of prevention strategies, ‘risky practices’ remained common” (1550). Reasons for inaction may include: dynamics of street based drug scenes (including reluctance to use with others due to few trustworthy relationships and fear of violence); drug availability (lack of market predictability); unknown contents of purchase (due to various buffing agents); withdrawal (decisions based on being ‘dope-sick’); stigma (non-disclosure of behavior due to fear of judgment); desire for heavy intoxication (need to reach a desired effect); and polydrug use (both due to availability and desired effect). These dynamics all impede an individual’s ability to practice harm reduction which may lead to a negative outcome, such as injury or death.

2.3.2. Risk Environments – Supervised Injection Facilities

The “risk environment” framework by Rhodes (Rhodes, 2002) describes the role of social and structural environments in the production and reduction of harm related to individual drug use. This research will focus on the structural environment at the organizational and policy level. Acknowledging this role of the structural risk environment helps identify both the limits and the opportunities of public health interventions related to this context (Rhodes, 2002).

One intervention that targets the drug use ‘risk environment’ is supervised injection facilities (SIF). SIFs are designed to minimize injection drug related harm, and often operate with peer staff and registered nurses (RN); Insite in Vancouver, BC is an example of a SIF. Persons who inject drugs (PWID) can inject previously obtained drugs at this facility. Some of the many health services offered at Insite that contribute to decreasing the risks of drug use are: sterile injection equipment, safer injection teaching, detox referrals, overdose interventions, and opioid replacement therapy (Insite, n.d.; researcher’s nursing experience at Insite).
There are several ways fatal opioid overdoses are prevented at Insite. First, when clients enter the injection room, they tell staff what substance they plan on injecting. At this time, the client is encouraged to tell staff whether he or she is at additional risk of overdosing due to other factors which include drinking alcohol, having a recent period of abstinence from opioids, and experiencing a recent overdose. When participants disclose an extra risk, Insite staff use this opportunity for harm reduction teaching and/or closer observation of that client. When clients are finished injecting they leave the injection room and exit through the peer run, “chill-out” room. Participants are encouraged to spend time in this area in the event of a delayed overdose response, and peer staff are present in the chill-out room to monitor participants for overdoses. When an opioid overdose event occurs at Insite, staff respond by informing an RN. The nurse will assess the client and administer oxygen, and naloxone, if needed. Peers and other trained staff can also participate in overdose interventions with the RN. Paramedics are often called for backup support following prolonged overdoses.

There are only two locations providing supervised injection services in North America, and both are in downtown Vancouver; the Doctor Peter Centre and Insite have been operating since 2002 and 2003, respectively. Nevertheless, expansion of this service in Canada is slow. The Conservative government lost its battle in Supreme Court to close Insite in 2011 (Kazatchkine et al., 2014), but it succeeded in introducing the Respect for Communities Act (Bill C-2) on June 22, 2015 (Bill Adding New, 2015). This bill increases the administrative burden for Insite and any new SIF applicants in Canada. No SIF applications have been accepted since the BILL C-2 legislation came into effect; Insite, however, remains open.

2.4. Illicit Opioid access in Canada

The usage of illicit opioids among Canadians is increasing. According to Fischer and Argento (2012) the non-medical use of prescribed opioids is the third highest cause for morbidity in Canada, after alcohol and tobacco. In addition, Canada and the United States (USA) lead all nations in prescription opioid consumption (Fischer, B. et al., 2010). These macro-systematic factors are important to situate in the context of this research as they emphasize the scope of this problem beyond the narrow supportive housing setting.
One of the larger systemic problems that has been relevant to opioid overdose in the past few years is prescription drug delisting and availability. For example, according to Maladi et al. (2013), regions of Ontario that reported high rates of opioid overdose death also reported high rates of prescription opioid use. The Canadian Drug Policy Coalition reported that seven provinces responded to the problem in Ontario by removing OxyContin from their respective provincial drug formularies in an effort to prevent further overdose fatalities (Carter & Graham, 2013). This action has been associated with some PWUO switching to alternative prescription drugs of equal strength, or to illegal alternatives (Carter & Graham, 2013). Among illegal alternatives, the use of heroin and fentanyl analogues increased as a cheaper option (Opioid Overdose Prevention Training, 2013). The delisting of OxyContin has also contributed to the observed increase in opioid overdose fatalities due to individuals finding substitutions to their previous therapies.

2.5. Naloxone access in Canada

Naloxone is an opioid blocker that was traditionally administered by emergency response personnel to reverse opioid overdoses (Harm Reduction, n.d.). This has changed, however, since naloxone was first trialed in a pilot research study with PWID in San Francisco in 2001 (Seal et al., 2005). Naloxone is available over the counter, without a prescription or training requirements in fifteen American States (Szalavitz, 2015). In contrast, naloxone in Canada is a prescription only medication due to its scheduling limitations, and is currently only prescribed to PWUO by participating medical providers. If naloxone were to be reclassified from the National Association of Pharmacy Regulatory Authorities (NARPA) Schedule 1 medication to a Schedule 2 medication, naloxone could be available without a prescription through a pharmacy. Currently Health Canada is reviewing this regulation and this verdict is expected in early to mid 2016 (Southwick, 2015). Assuming that Health Canada follows the trajectory of the USA, it is reasonable to expect that naloxone will be rescheduled.

2.5.1. Naloxone Access in BC

In most provinces, only medical doctors (MD) are able to dispense naloxone to people at risk of an opioid overdose. As of 2015, all RNs in BC are legally able to
administer and dispense naloxone to people at risk of an opioid overdose, with the aid of a Decision Support Tool (DST) produced by the British Columbia Centre for Disease Control (BCCDC) (Dispensing Naloxone, 2015). This DST is a protocol used to guide RNs in determining which patients are candidates for naloxone, along with outlining relevant patient teaching. It is incrementally being adopted across the province.

BC is also leading the way with some first responders having access to naloxone. On January 28, 2016 firefighters in Surrey began training to administer naloxone (Firefighters, 2016) to allow for quicker opioid overdose responses if firefighters arrive before the paramedics. The Vancouver police department is not participating in this endeavor, however, as they are waiting until an intranasal alternative is available rather than current intramuscular injection (Woodford, 2016). The nasal administration of naloxone became legal in the USA in November 2015 (FDA, 2015), but the timing of a Canadian equivalent version is unknown.

### 2.5.2. Naloxone for Frontline Shelter Workers in Ontario

Ontario is currently facing a similar need as BC, which is to mandate opioid overdose prevention and response training (along with naloxone availability) for frontline homeless support service workers. Dr. David McKeown, a medical health officer (MHO) for Toronto Public Health, described three instances where the opioid overdose prevention and response training need was identified, for this sector. In a letter to the College of Physicians and Surgeons of Ontario he states: in one incident a man who had naloxone in his pocket died in a shelter (staff there did not know what naloxone was, nor would they have know how to use it if it was found); a man died in a drop-in centre because the 911 response took too long and staff did not have opioid overdose prevention and response training, and finally; at another agency a client overdosed and was rescued by another client because staff did not know how to intervene, nor did they have access to naloxone (2015). This is the best example of another province taking the initiative to highlight the importance for non-medical frontline homeless support service workers to be trained to intervene in opioid overdoses.
2.6. Take Home Naloxone Program in BC

The BCCDC administers the Take Home Naloxone (THN) training program, which is BC’s current standardized training for intervening in an opioid overdose. This training is not required, and supportive housing agencies need to request training support from their local health authority or the BCCDC. Vancouver Coastal Health (VCH) also provides training to frontline staff and clients of partnering supportive housing agencies in the city of Vancouver, free of charge. The training is for those who are at risk of opioid overdoses, and those who want to be trained for professional or personal reasons. The THN kits include the supplies needed to reverse an opioid overdose (naloxone, needles, breathing mask) and are only available to people at risk of an opioid overdose.

Although it is not specific to housing, the THN training is currently available to frontline staff working in supportive housing. Any frontline staff can take the training, however, receiving access to naloxone is currently restricted by the agency to only PWUO. Therefore, even if frontline staff are trained in opioid overdose intervention and naloxone administration, their access to naloxone is not guaranteed in the event of an overdose. Creative strategies to obtain naloxone have been taken by some agencies and are outlined in 4.3.6 (Barriers to Naloxone Access).

Agencies that want to independently train and dispense naloxone must partner with the BCCDC to become a dispensing site (Take Home Naloxone, 2015). Dispensing sites are required to have an RN or MD on staff who can oversee the program and dispense the naloxone. The BCCDC provides their partnering sites with the THN naloxone kits. The BCCDC began the THN program in 2012 and they now have more than 125 partnering locations around the province (Drug-Overdose, 2016).

2.7. Background Summary

• One of the main objectives of supportive housing is to provide an opportunity for people with substance use issues to stabilize essential aspects of their lives, and minimize health and social harms.

• The Residential Tenancy Act which regulates supportive housing does not require supportive housing agencies to be licensed.
• BC Housing and the health authorities fund many of the supportive housing agencies in BC.

• Accidental illicit drug overdoses in BC are at their highest peak now since 1998.

• There are many factors that increase the risk of overdose among PWUO in supportive housing environments, but there are measures that can be used to minimize those risks.

• There are many impediments to harm reduction efforts, including PWUO who feel an urgency to use drugs as way to feel ‘well’ despite the importance of morbidity and mortality prevention.

• Acknowledging the role of the structural risk environment of supportive housing helps to identify both the limits and opportunities of overdose prevention interventions in this unique setting.

• Although many provinces delisted OxyContin as a reactionary measure to opioid overdose deaths, this policy has been associated with people using alternate prescription and illicit opioids. These substitutions may have contributed to an increase in opioid overdose fatalities.

• Access to naloxone, an injectable medication that reverses the effect of an opioid overdose, is limited but increasing in BC. Access is limited because naloxone can only be prescribed to people at risk of an opioid overdose. However, RNs in BC are currently allowed to dispense and administer naloxone and firefighters can now administer naloxone.

• The THN program is run by the BCCDC. This program provides opioid overdose prevention and response training for anyone, but is only able to dispense THN kits to people at risk of an opioid overdose due to the scheduling limitations with Health Canada.
Chapter 3.

Methodology

The central research question guiding this study is: What are the best ways to prevent fatal opioid overdoses in supportive housing? To understand this problem, the author identified possible policy interventions and evaluated them based on data from qualitative interviews with individuals who either worked for, or were affiliated with, supportive housing agencies in BC. The author also conducted focus groups with clients from one supportive housing agency. The focus group data were collected as part of a larger research initiative with Vancouver Coastal Health (VCH) and the University of British Columbia (UBC). Permission was granted to use the focus group data collected in this study.

3.1. Qualitative Interviews with Key Informants

Twelve qualitative key informant interviews comprised the majority of data collection for this project. The purpose of the interviews was to: supplement the literature review; understand the context and dynamics of the policy problem; and aid in the identification and evaluation of potential policies to address the problem of opioid overdoses in supportive housing settings. Initially, recruitment was focused on frontline supportive housing staff who worked for agencies with at least some opioid overdose prevention and response training. It became clear, however, that there were many key professionals working with these agencies who also played a role in opioid overdose interventions. Interviewees were recruited via the author’s professional contacts at VCH, the BC Centre for Disease Control (BCCDC) and Portland Hotel Society (PHS). The initial group of twelve interviewees were comprised of: four supportive housing managers; three frontline staff; four affiliate health care professionals; and one coroner. The interviewees represented both urban and rural locations in BC. As well, the interviewees represented a range of supportive housing environments including: emergency shelters; drop-in services; supportive housing multi-unit buildings; and scattered supportive housing units.
The interviews followed a semi-structured approach (See Appendix E & F for question guide). This format allowed for flexibility in the dynamic two-way conversation between the researcher and each interviewee. Sixsmith (2015), Simon Fraser University’s Public Policy professor on Advanced Qualitative methods, describes semi-structured interviews as bringing focus to the interview but allowing for divergence. The interviews were conducted using interview guides tailored to the varying work experiences of either supportive housing staff or affiliate workers. The interviews were conducted both over the phone and in-person. The in-person interviewees received a $10 gift card at the end of the interview.

To supplement this data, a second set of brief follow-up semi-structured telephone interviews were completed with eight of the original twelve interviewees, and one new interviewee, a researcher, for a total of nine interviews. The purpose of these interviews was to receive feedback and assessments from the interviewees regarding the proposed policies that had been developed since the first interview. The interview guide for the follow-up interviews included a verbal description of each policy, followed by soliciting feedback from the interviewees on these options. The primary motivations for this phase of interviews were to demonstrate the perceived strengths, limitations, and possible implementation barriers and facilitators. These interviews resulted in a variety of thoughtful analyses for the proposed policies.

3.2. The Focus Groups

The focus group data was obtained from a UBC research study, examining the delegation of naloxone administration from medical health officers (MHO) to frontline non-medical supportive housing staff. The author’s role with the UBC focus groups included contributing to the design of the interview guide, and scheduling the focus group meetings with the agencies. For the focus group sessions, the author co-facilitated the discussions, took notes, and transcribed the audio recording. The focus group participants were clients from one supportive housing agency but different housing facilities located in the Vancouver metropolitan area of BC. One goal of the focus groups was to understand the context and dynamics of the problem of opioid overdoses in supportive housing settings. Clients’ knowledge of the problem in supportive housing was examined, as well as their
perspectives on overdose risks. These focus groups were the sole method of obtaining data from clients of supportive housing.

The focus groups were held in five of the participating supportive housing agency’s facilities. The participants were recruited from tenant meetings as well as staff outreach and posters, however, most of the participant involvement occurred through outreach on the date of the focus group. Three researchers facilitated a total of five groups; each group had three to four clients, for a total of 14 participants. The author co-facilitated four of the five focus groups. Each focus group lasted one hour, and participants received a $5 gift card for their participation. A semi-structured interview schedule was used to allow for effective conversation-like data collection.

The completed demographic forms of the focus group participants showed the group comprised of 10 men and four women, with a median age of 55 and a median level of grade 12 education. A total of 12 (86%) had used alcohol and/ or illicit substances; the relevant substances of choice were opioids (n=4, 33%) and illicit drugs (n=7, 58%). Due to the unknown content of illicit drugs, the majority of participants were therefore at risk of exposure to fentanyl and consequently an opioid overdose.

### 3.3. Thematic Analysis

Thematic Analysis was the method used to analyze the transcription of both the interviews and focus groups. An advantage of thematic analysis, noted by Braun and Clarke (2006), is its flexibility through theoretical freedom. This method is structured, however, and the six-phase process of thematic analysis is outlined below.

A six-phase process for the analysis of data was adopted and consisted of: (1) become familiar with the transcripts, (2) generate initial codes, (3) search for themes, (4) review themes, (5) define and name themes, and finally, (6) produce a report. Identifying the stages of this thematic analysis is expected to minimize assumptions or make assumptions obsolete (Braun & Clarke, 2006). The interview and focus group data were first transcribed, then sorted and analyzed via this method. The research findings were
supplemented with evidence derived from the literature review as opposed to separating the information into discrete elements.

3.4. Limitations of Data Collection

First, the research focus of this study was supportive housing agencies that allow clients to use opioids and other substances in their private rooms. All of the agencies researched for this study were already initiating opioid overdose prevention and response training for frontline staff. The findings of this research have implications for other types of housing agencies that do not explicitly allow substance use on the premise, as opioid overdoses occur in all settings including treatment and recovery programs where clients are expected to be abstinent from substances. The setting may heighten or decrease opioid overdose risks for residents, depending on the guiding policy of the agency.

Second, the data for this research were collected in a BC context; however, the increase in illicit drug overdose fatalities is a Canada-wide problem. In addition, the role of supportive housing in addressing this problem has received minimal to no attention in other provinces; therefore, the recommendation of this research study has practical applications for other provincial opioid overdose prevention strategies.

Third, the focus groups were comprised of a small sample of clients from only one supportive housing agency in Vancouver. Data from only one agency is not representative of the range of experiences clients have across supportive housing agencies in the province. In addition, the clients in these focus groups were more diverse than the scope of this study. The sample of clients came from a combination of the agency's drop-in, emergency shelters, and supportive housing sites, whereas this study focused only on supportive housing clients. Many of these clients did live in supportive housing, but a few were temporarily housed or homeless.
Chapter 4.

Research Findings and Analysis

The interview data from the two sets of qualitative interviews with key informants, combined with data from five focus groups, are summarized into themes with support from the literature review. The themes that emerged from the interviews are described in this section. They address the problem of fatal overdoses in supportive housing settings, the current lack of government-led initiatives to address opioid overdoses, and issues with current opioid overdose responses in supportive housing settings.

4.1. The Problem of Fatal Opioid Overdoses in Supportive Housing Settings

The number of fatalities occurring in supportive housing settings could not be determined based on the author's research or available data. Publicly available data from the BC Coroner, *Illicit Drug Overdose Deaths in BC 2006-2015*, specifies fatalities by township, but does not disclose addresses or settings. Estimates from the BC coroner interviewee suggest that the number of heroin fatalities was two to three times higher in supportive housing and single residency occupancy (SRO) hotels. In addition, they estimated that fatalities due to polysubstance use in these settings were three to four times higher than others.

All other interviewees and focus group participants verified that overdoses were a frequent occurrence in their agencies. Some discussed examples of client fatalities and some described non-fatal overdose events. These overdose accounts were all based on the interviewee’s personal experience and not agency or other official data. All respondents indicated, however, that their respective agencies were initiating unofficial opioid overdose interventions as a response to the number of fatal and non-fatal overdose incidents among their clients.
4.2. **Current Lack of Government-Led Initiatives to Address Opioid Overdoses**

Most of the interviewees disclosed that the initiation of any opioid overdose intervention came primarily from within their organization; none had received direction from their municipal government, health authorities, or the provincial government (BC Housing). There is also no evidence of collaboration among supportive housing agencies in BC addressing this issue. Health authorities are currently responding to requests for frontline staff and client overdose training, as well as naloxone access from supportive housing agencies that are taking initiatives to address this issue.

4.3. **Issues with Current Opioid Overdose Response in Supportive Housing Facilities**

Current opioid overdose responses in supportive housing facilities are summarized in the following sub-headings: lack of formal opioid overdose intervention protocols; gaps in identifying clients at risk of an opioid overdose; inadequate frontline staff training; inadequate client feedback and training; issues of guest opioid overdoses; barriers to naloxone access; barriers and facilitators to opioid overdose response time; room checking as an opioid overdose intervention strategy; and supervised rooms as an opioid overdose intervention strategy.

4.3.1. **Lack of Formal Opioid Overdose Intervention Protocols**

The frontline supportive housing staff members that were interviewed for this project were from nine different facilities in five different agencies, and reported having a range of informal opioid overdose interventions currently in place. None of the interviewees, however, were aware of their agencies having a setting-specific protocol addressing procedures for how to intervene in the event of an opioid overdose. One agency did report having a manual on how to medically manage opioid overdoses, with a visual algorithm to guide responders. This manual was not, however, an official overdose intervention protocol for an agency response.
Without an agency-specific protocol, opioid overdose interventions are not transparent to clients and frontline staff. One interview participant described a situation where a client approached a staff member and indicated that they were planning to inject an unknown substance and would like staff to witness their injection and intervene in the event of an overdose. The staff replied that they were unclear on whether they could be present to supervise an injection, and advised the client to go elsewhere for support. Due to the lack of a guiding protocol, the opportunity to help manage this client’s overdose risk was lost. According to another interviewee, many frontline housing staff make special efforts to track clients who they assess as being at heightened risk of an opioid overdose (e.g. due to recent detox or hospitalization); these were personal initiatives, however, and it was unclear to the interviewee whether their co-workers did the same. These are just two examples of how the lack of formal opioid overdose intervention protocols contributes to inconsistent frontline staff interventions with clients who are at risk of having opioid overdoses.

4.3.2. Gaps in Identifying Clients at Risk of an Opioid Overdose

All interviewees and focus group participants acknowledged that opioid use was a regular occurrence in their housing facilities. Despite this awareness, interviewees reported that there were no formal procedures in place or recognition of the importance of identifying the number of clients who are persons who use opioids (PWUO). According to one of the interviewees, there are no requirements for PWUO to change their substance use behavior in supportive low barrier housing settings; they are free to use substances in their private units. For individuals with a history of homelessness and street drug use, becoming housed significantly changes the setting of their drug use. Two focus group participants suggested that one strategy to reduce overdoses in supportive housing would be to record the substance preferences of clients, particularly clients that use substances with a higher fatal overdose risk (e.g. alcohol, benzodiazepines, opioids). Only one interviewee indicated that their facility made an effort to assess the number of opioid-using clients, however, this was not for an internal risk assessment; this information was collected as part of the external housing database application that may not reflect current drug use patterns.
The interviewees indicated that they were reluctant to press clients for information about their substance use patterns. They preferred first to establish trust with their clients, and felt clients would self-disclose once they felt safe (from judgment and/or possible eviction). All interviewees reported knowing many of the opioid-using clients in their facilities. This information was gleaned from personal interactions and was not knowledge that the agency collected in a systemic way to identify and assess client risks. Many interviewees spoke about using communication logs, and all had incident reports that helped communicate acute issues. One interviewee spoke about developing safety plans with clients when they were concerned about a substance use issue. The general assumption, however, was that clients wanted their privacy. Although this is understandable, there is an important drawback of not assessing which clients are at heightened risk. As discussed by Moore (2004), agencies place the onus on the client to take harm reduction measures and disclose their opioid overdose risk, which puts the responsibility for opioid overdose interventions on the client. Individuals who are struggling with substance use and mental health issues cannot be expected to have the ability to initiate harm reduction efforts consistently. As such, supportive housing agencies need to take responsibility and assert their role in reducing opioid overdose fatalities for their clients.

4.3.3. Inadequate Frontline Staff Training

Another issue discussed during the interviews was the approaches agencies use to train their frontline staff in overdose interventions. Some interviewees described their agencies as having this regular paid staff training, whereas other interviewees explained that paid opioid overdose prevention and response training for frontline staff is only available during new employee orientation, and any supplemental refresher trainings are unpaid. Some agencies mentioned that refresher training was held, but did not describe a precise time frame in which this was required. There was also no mention of practice drills to reinforce the necessary skills needed to respond to an overdose. Interviewees reported that trainings were offered in a variety of formats: internally from an agency educator or trained manager or externally from a health authority or non-profit educator.
In their *Security, Safety & Emergency Preparedness Guide*, BC Housing “encourages” frontline supportive housing staff to receive life-saving training only for Cardiac Pulmonary Resuscitation (CPR) and First Aid (Security, Safety, 2015). An important feature of these classes is managing medical emergencies before emergency responders arrive; however, a specific skill set is required to manage an opioid overdose until paramedics arrive, and this is not addressed in existing CPR and First Aid courses. And although opioid overdoses are a relatively frequent occurrence in supportive housing settings, there is no mention of this issue in the BC Housing *Security, Safety and Emergency Preparedness Guide* (2015).

There was a mixed response when clients of the focus groups were asked about whether they knew if frontline staff were trained opioid overdose interventions at their agency; roughly half knew that staff had training and the other half were unaware. Consequently, the response to whether clients would ask frontline staff for help in an overdose event was mixed. This lack of transparency regarding frontline staff training in opioid overdose prevention and response impacts the number of clients that could potentially benefit.

According to research from the BCCDC, frontline staff who feel properly trained and are confident in their opioid overdose intervention skills experience less distress in the event of an overdose (Amlani et al., 2015b). Similarly, frontline staff experience more job-related stress and anxiety when opioid overdose protocols are not explicitly defined by their employer agency (Amlani et al., 2015b). The BCCDC also emphasizes, for legal reasons, that it is particularly important for agencies to be clear in their protocols. Non-medical frontline staff who assist in opioid overdose interventions, as a condition of employment, are not legally covered by the Good Samaritan Act (Good Samaritan, 1996). This is especially relevant in opioid overdose reversal scenarios that have a negative outcome. The lack of clarity around agency support for frontline staff may contribute to additional unnecessary stress on the job, and also inadequate responses to overdose events due to the fear of legal repercussions. Frontline non-medical staff are only required to call for emergency services in the event of an opioid overdose scenario, but this limited response could result in morbidity or mortality if emergency services are slow to respond.
One interviewee, a registered nurse (RN), was adamant that an RN should be responsible for the opioid overdose prevention and response training. This interviewee’s explanation was that his/her experience in nursing was valuable for answering medical related questions on overdose topics. As well, this interviewee felt that a nurse was the best instructor for naloxone-related injection techniques. The BCCDC Training Manual: Overdose Prevention and Response (2012) states that the educator for opioid overdose interventions needs to be a health professional (e.g. medical doctor (MD) or RN).

Three interviewees expressed the importance of peer-led opioid overdose prevention and response trainings for frontline staff and clients, as they believed people who use drugs were the most important experts on overdose prevention and response. One interviewee researcher from the BCCDC stated that his/her experience had shown that peer-to-peer training increased participation.

4.3.4. Inadequate Client Feedback and Training

Only a few of the frontline supportive housing staff who were interviewed for this research reported that their agencies include client feedback in their opioid overdose intervention strategies. When solicitation of client feedback did occur, it had a variety of different forms. Some agencies reported having client advisory groups that provide feedback on all facility operations that affect clients, another facility had a suggestion box, and other facilities conducted surveys with clients. The importance of including clients who use drugs in the decision-making process is described in the document, Nothing About Us Without Us (2006), which summarizes how the inclusion of persons who use drugs (PWUD) is a public health, ethical and human rights imperative. If supportive housing is going to be an environment for effective solutions to prevent fatal opioid overdoses, more client involvement is essential.

Over half of the agencies represented through qualitative interviews reportedly offered opioid overdose prevention and response trainings either on or off site for clients; however, the frequency of training was unclear. One client out of 14 in the focus groups (where only one agency was represented) reported receiving Take Home Naloxone (THN) training, and a few other participants were able to accurately describe how to prevent and respond to opioid overdoses. Other focus group participants talked
about how they kept overdose victims awake with cold water and kept them mobile, however, neither of these methods will actually reverse an opioid overdose in the event that an individual has consumed an excessive amount of opioids. Two clients in two separate focus groups expressed a desire to have either harm reduction or overdose trainings, and thought that this is a service that the agency should provide. These client’s desires to participate and increase their skill sets in overdose interventions is important feedback as supportive housing agencies consider how to address this issue.

4.3.5. Issues of Guest Opioid Overdoses

Interviewees identified guests as another high-risk group for opioid overdoses in supportive housing. All agencies have different guest policies, but many allow guests to enter the building. Once admitted into the building, guests have access to a private place to use drugs. It is preferred that drug use occurs in their client contact’s room, but guests may find another space such as a bathroom or secluded stairwell for this purpose. One interviewee described a guest’s fatal overdose that happened in a public bathroom in a supportive housing setting. Other interviewees reported that non-fatal opioid overdoses of guests occur quite often.

One of the highest risks of illicit drug use is that using alone can increase the chance of dying because there is no one to intervene in the case of an overdose. Supportive housing agencies need to support any effort for safer drug use by their clients. Clients are legally allowed to have guests under the Residential Tenancy Act (RTA, 2015), but many supportive housing agencies continue to have guest restrictions. The Residential Tenancy Act allows clients to make complaints about guest restrictions, but this often does not happen due to the fear of eviction (Edby & Misura, 2006). When fear of eviction surrounds guest-related issues, this may decrease the likelihood that clients or guests will ask frontline staff for help in the event of an emergency. Supportive housing agencies need to explicitly state to all people who enter the building that they can ask for help in the event of an overdose without fear of consequences, such as eviction.
4.3.6. Barriers to Naloxone Access

Most naloxone in supportive housing agencies is supplied by the BCCDC. All mentions of the THN kits refer to this supply from the BCCDC. Owing to the prescription limitations described in section 2.5 (Naloxone Access in Canada), naloxone can only be prescribed to people who are at risk for an opioid overdose. The qualitative interviews revealed a variety of creative strategies that allow agencies to have access to naloxone which include:

1. An agency with a clinic program has their medical director designate naloxone ward stock to their various housing sites. The agency would purchase this medication for 'clinical' purposes.

2. Outreach RNs leave their own naloxone prescription (THN kit) with agency partners. RNs and MDs are currently the only medical professionals permitted to have their own naloxone prescription.

3. Frontline Housing staff are prescribed naloxone either because they are at risk, or they 'say' they are at risk of an opioid overdose. These prescriptions (THN kits) are used in the work place.

4. Agencies document which clients have naloxone (THN kits) and where it is kept in their room.

5. Agencies keep all known client naloxone (THN kits) at the front desk for frontline staff to use in any opioid overdose on site.

One interviewee stated, however, that keeping clients’ naloxone at the front desk is problematic. When clients do not have access to their naloxone and frontline staff are temporarily unavailable, clients do not have the ability to intervene effectively in an opioid overdose, which could result in a fatality.

The delay for access to naloxone currently relies on a review from Health Canada. This review will determine if it is medically necessary to change naloxone scheduling, which would increase its access to more people than just PWUO. With a change in federal
policy, frontline workers (e.g. frontline supportive housing staff, police and firefighters) across the country could have naloxone available for their use on the job. Based on Health Canada’s review, naloxone without a prescription could be available in early 2016 (Health Canada, 2016).

4.3.7. Barriers and Facilitators to Opioid Overdose Response Time

A crucial factor for opioid overdose survival rates, confirmed by the literature, is the ability to reduce response time. Minimizing the amount of response time in an opioid overdose scenario is essential. One factor contributing to delayed responses is that not all agencies provide phones in client rooms. As explained by one interviewee, even if agencies do provide phones, there are some clients who will not use them for a variety of personal and mental health reasons. Other agencies provide limited phone access for clients who do not have personal phones. One focus group participant reported that the lobby phone for public use was locked away at night, leaving many clients without any phone access for emergency needs.

Two clients in two separate focus groups suggested designating an emergency contact on each floor as a possible way of reducing response times to overdose events. The emergency contact would be someone clients could ask for assistance from in any emergency, including an opioid overdose. The same two focus group participants suggested that emergency naloxone be made available on each floor for immediate access to building occupants, similar to fire extinguishers. This would allow for increased access to naloxone separate from any additional volunteer/staff assistance.

According to several interviewees, regardless of the opioid overdose intervention policy, a communication strategy to advertise the agency’s plan to prevent opioid overdoses was essential. Some agencies used naloxone door signs and lists of names of clients and frontline staff with opioid overdose training as part of their strategies. The BC coroner interviewee suggested that having signage on every floor guiding people to naloxone storage locations would improve overdose response times, especially for guests who may be unfamiliar with the building. One interviewee described their success with a low literacy algorithm poster that guided clients and frontline staff on how to intervene in an overdose. One of these same participants suggested posting a universal sign for
naloxone at the front desk. This will inform anyone who enters the building that frontline staff will intervene with naloxone in the event of an opioid overdose.

4.3.8. Room Checking as an Opioid Overdose Intervention Strategy

Many frontline supportive housing staff spoke of offering individualized services to clients at their request, such as checking on them in their rooms post-consumption of a substance. This is not a formalized protocol (and therefore not transparent and accessible to all) and is not a service that all agencies offer. All interviewees spoke about a required ‘missing person’ room check for clients not seen in a set period of time, which varied between agencies from one to three days. According to the researcher’s personal nursing experience responding to opioid overdoses at Insite, however, multi-day scheduled room checks are not a viable opioid overdose prevention strategy given that overdoses can happen within minutes.

4.3.9. Supervised Room as an Opioid Overdose Intervention Strategy

According to many interviewees and focus group participants, a staff supervised room is used to observe clients post-substance use. The interviewees explained that many clients currently request frontline staff to observe them in a common area after drug use, when they are concerned about an overdose risk. This is an unofficial and consequently unadvertised opioid overdose intervention strategy that is currently used by a number of different agencies. These communal rooms are not used for supervised substance use, due primarily to legal issues. Frontline staff regularly discourage clients who are seeking supervised consumption from using substances in these common areas. When there is no option for frontline staff to observe a client injecting, the likelihood of detecting and responding to an overdose event is reduced, especially when frontline staff have no knowledge about when the client injects. Offering to observe any clients in a common area after their drug use is a practical service that supportive housing agencies can offer.
Chapter 5.

Policy Options

This chapter outlines five policies for improving opioid overdose interventions in supportive housing. The first policy, Mandated Opioid Overdose Prevention and Response Training, is considered an essential policy intervention as it covers the basic skill set needed to respond to an opioid overdose. This policy will be described but not evaluated against the other policies. The remaining four policies are setting-specific and will be evaluated against four defined criteria (described in further detail in Chapter 6) and each other to determine the best course of action. Data from qualitative interviews, focus groups, and the literature review helped shape these policies.
<table>
<thead>
<tr>
<th>Policy Options</th>
<th>Definition</th>
</tr>
</thead>
</table>
| 1) Opioid Overdose Prevention and Response Training | • Training taught by an in-house staff educator and/or peer service advocates (peer staff, PSAs).  
• Annual refresher opioid overdose prevention and response training and practice drills required for frontline staff and PSAs, and occur during paid time.  
• Internal staff educator and PSA positions – number depends on size of agency.  
• Training for all clients are voluntary and paid.  
• Registered nurse (RN) to co-facilitate all trainings to answer medical questions and write naloxone prescriptions for frontline staff or clients that identify as at risk of an opioid overdose. |
| 2) Opioid Overdose Intervention Protocol           | • Protocol template development facilitated by BC Housing and the health authorities but inclusive of client and frontline staff feedback.  
• 3 categories of the protocol include: prevention, response, and client involvement.  
• PSA role.                                                                                                                                                                                                          |
| 3) Increase Access to Naloxone                    | • Naloxone accessible to building occupants in a central place in each facility.  
• Storage for this naloxone is in an unlocked, alarmed box.  
• Client emergency contact volunteers on each floor.  
• Requires Health Canada to amend scheduling of naloxone.  
• Client and frontline staff feedback included.                                                                                                                                                                     |
| 4) Supervised Room                                | • Supervised room for observing clients, following the use of any substance.  
• Clients encouraged to inform frontline staff when they are going to their room to use any illicit substance, to allow for room checking.  
• PSA role.                                                                                                                                                                                                          |
| 5) Supervised Injection Room                      | • Supportive housing agencies to offer a supervised injection room.  
• Room supervised by RN, PSA manager or a PSA.  
• Legal operations dependent on Section 56 exemption.  
• PSA role.                                                                                                                                                                                                          |
5.1. Mandated Opioid Overdose Prevention and Response Training

5.1.1. Description

This policy involves BC Housing and the local health authorities mandate that all frontline non-medical staff in supportive housing facilities be trained to respond to opioid overdoses. Under this policy, opioid overdose prevention and response training are paired with Cardio Pulmonary Resuscitation (CPR) and First Aid, which are currently not required of all frontline staff by BC housing. Opioid overdose training would occur during paid staff time on an annual basis and follow the format of the Take Home Naloxone (THN) training from the BCCDC.

As a result of BC Housing and the local health authorities mandating overdose training for all frontline non-medical staff in supportive housing agencies, there would be clear directives that frontline staff trained for this purpose are protected by their employer from any liability resulting from an opioid overdose intervention. As stated in 4.3.3 (Inadequate Frontline Staff Training), the Good Samaritan Act does not cover employees who are trained for an intervention that is a condition of their employment, which in this case is an intervention in an opioid overdose. The names of trained frontline staff and dates of training would be documented by the agency to ensure compliance with required annual training.

Trainings for clients would be optional, but would include an annual financial incentive. Honoring client’s time with a monetary stipend is as essential as paying for frontline staff training (Nothing About Us Without Us, 2006). This would ideally increase the number of clients participating in the training, resulting in more possible responders in opioid overdose events. Preferably these trainings would happen onsite at each facility in order to increase the chance of client participation. Including clients in this training not only helps increase safety, but also decreases stigma. As described by one interviewee:

It is really cool to see how empowered [clients] feel, like [clients] are generally pretty stoked to have naloxone and should be identified as someone who has this service to offer. You know that they have gone through the training and they know how to use it. There is a real sense of pride you know? (Frontline Worker B, interview by author, 9 Nov. 2015)
Once clients are trained, they can volunteer to put their name on the opioid overdose emergency contact list to assist other clients, and/or put an official agency overdose responder sign on their door.

The proposed approach for training frontline staff and clients in supportive housing in opioid overdose prevention and response is: first, external personnel (e.g. from a health authority or non-profit) train internal supportive housing educators; second, internal educators train client-trainers (peer service advocates, PSA) annually, and; third, the internal educators and PSAs train the frontline staff and clients together. In order to increase access to naloxone prescriptions and provide answers to any medical questions, an RN will also co-facilitate each training. The RN will able to prescribe THN kits to any frontline staff or clients who identify as an opioid user. The opioid overdose prevention and response training will be two hours in length. It will not be offered using online education as there are hands-on skills required that are more effectively taught via an in-person instructor.

The proposed “train the trainer” model is based on recommendations in the Vancouver Coastal Health (VCH), *Downtown Eastside (DTES) Second Generation Health System Strategy* (2015). This document states that VCH has had success in their naloxone and overdose prevention programs, and that they will expand the train the trainer model for both peer trainers and VCH staff. This funding priority is specific to only one health authority in BC, but with proven success other provincial health authorities may follow.

### 5.2. Opioid Overdose Intervention Protocol

#### 5.2.1. Description

An official opioid overdose intervention protocol will be required by BC Housing and local health authorities for all the supportive housing agencies they fund. BC housing and the local health authorities will provide customizable templates for agencies, which include key components of overdose procedures (see description below). The templates will be developed using established best practices and survey feedback from frontline staff
and clients of supportive housing. The customization at each unique agency will also require feedback from the frontline staff and interested clients. This protocol will then be applied universally in the agency to be inclusive of all clients who use opioids. In order for frontline staff and clients to know how to respond and have access to an agency supply of naloxone, this option is dependent on policy 5.1 Mandated Opioid Overdose Prevention and Response Training. The three categories of the protocol include: prevention, response, and client involvement.

1) Prevention – To decrease the occurrence of opioid overdose events.

- Identify clients who use opioids

New clients in the housing agency will be invited to share their substance use history with a designated intake staff or PSA with the aid of an assessment tool. The purpose of a tool, as described by Flemen (2010) author of the Housing Opiate Overdose Risk Assessment Tool, is to prevent drug-related deaths that often occur early in a person’s tenancy. He elaborates by saying, “all too often the risk factors that increased the chance of an overdose were there, but they hadn’t been assessed” (1). This tool would help frontline staff identify which clients engage in higher risk activities (see Appendix C). This tool may also help quantify the number of PWUD at the agency. With quantifiable documentation, agencies can advocate for more funding to support the population-specific needs of their agency.

The purpose of the assessment tool will be explained to clients in their orientation to the housing agency. The client will not be required to participate in the assessment. If a client chose to participate, he or she would be given the option to complete the form themselves, with frontline staff or a PSA. It is important to note that even if clients are given an opportunity to share their opioid use behavior, not all clients would feel comfortable disclosing this information. As a result, even those clients not identified as persons who use opioids (PWUO) should still be considered at risk of an overdose.
• Opioid overdose care plans

Another fatality-prevention measure is the use of care plans. After a nonfatal overdose or a life event that increases a client’s overdose risk (e.g. recent detox, hospitalization, incarceration), clients will be invited to participate in creating an opioid overdose prevention care plan. This may include telling frontline staff or PSAs when, where and with who, they are going to use illicit drugs. This would help frontline staff and PSAs prepare to intervene if the client experiences an opioid overdose.

2) Response – Frontline staff, PSAs, and trained clients follow the steps outlined in the agency protocol when an opioid overdose occurs.

• Overdose drills

This practice needs to occur in order to synthesize knowledge for staff in each unique setting. The goal is to include frontline staff (including casual staff), PSAs and trained clients. These drills will happen in tandem with other emergency system drills, which occur minimally on an annual basis.

• Support post-overdose event

Managers will debrief, or minimally check-in, after each opioid overdose intervention with frontline staff and participating clients based on a defined agency process. The debrief will reinforce the protocol steps if any were missed or if any required further evaluation. It will also identify any participants in the opioid overdose intervention that need extra emotional or physiological support, which managers will help facilitate. Helping distressed frontline staff access the employer assistance program will be critical.

3) Client Involvement – Client involvement will be defined by both a feedback component and paid client positions (peer service advocates, PSA).

• Client feedback

The protocol implementation at each housing agency will require client feedback through the following: monthly tenant meetings; an annual anonymous survey (with a minimum number of respondents); and a suggestion/complaint box that will always be
available for clients. Feedback options need to be accessible and offered in a variety of different formats in order to encourage and enable participation from clients on policies that affect them.

- Paid client positions (peer service advocate, PSA)

An additional feature of this policy is increasing client involvement through the addition of PSAs. The PSAs will receive the same annual opioid overdose prevention and response training as frontline staff, and be required to participate in agency opioid overdose drills. The PSA program will have a manager to supervise and support PSA needs, especially as this work concerns potentially traumatic and stressful situations with their fellow clients (Nothing About Us Without Us, 2006). The addition of client involvement aims to promote collaboration with all frontline staff. The responsibility for the well being of facility clients remains with frontline staff, but staff now have the additional support of the PSA team. PSAs will be compensated for their time with an hourly wage.

5.3. Increase Access to Naloxone

5.3.1. Description

With the Increase Access to Naloxone policy, supportive housing agencies will be required to have naloxone accessible in a central public place in each of their facilities, similar to fire extinguishers. This policy will increase access to naloxone for frontline staff, clients, and guests of supportive housing facilities. In order for frontline staff and clients to know how to respond and have access to an agency supply of naloxone, this option is dependent on policy 5.1 Mandated Opioid Overdose Prevention and Response Training.

Naloxone will be stored in an unlocked, easily visible, wall-mounted container with an activated alarm system. Frontline staff will be able to turn off the alarm with a key, but anyone else will set off the alarm when the unlocked door is opened. When the door of the unlocked box is opened, the alarm will alert frontline staff and/or other clients that there is an opioid overdose occurring. When discussing this option with the BC coroner interviewee, they stated that in their experience building occupants in supportive housing facilities generally respect emergency response equipment and do not tamper with it.
5.4. Supervised Room

5.4.1. Description

BC Housing and local health authorities require supportive housing agencies to designate a room for frontline staff to observe clients at risk of an opioid overdose with the Supervised Room policy. As part of this intervention, clients will be encouraged to inform frontline staff when they will go to their room to use any illicit substance. Frontline staff will then determine a means of contacting the client within an established time frame via a room check, phone call, intercom, or other creative solution such as a baby monitor (audio or video). If the client requests a physical room check, the staff member will always bring a cell phone and first aid kit with naloxone in the event of an overdose. Clients will be encouraged to come to the common supervised area if continued overdose prevention monitoring is recommended by frontline staff.

Several factors for determining time frames for client checks must be considered for this policy. First, all routes of drug administration (oral, inhalation, insufflation, intravenous, and intramuscular injection) have varying absorption rates in the body. Second, some persons who inject drugs (PWID) have difficulty finding a vein for injection and this process can take an undefined amount of time. Third, staff need varying amounts of time to reach different clients’ rooms. A baby monitor was suggested as a tool that could be used to monitor clients and would allow frontline staff to be in contact with clients without continually going to the client’s room or calling repeatedly. Frontline staff will be able to communicate with clients through the monitor as needed to ensure client safety.

Clients at risk of opioid overdose will not be required to participate in this service. The terms of the policy will be easily accessible to all clients of the building to understand the benefits and shortcomings of how the agency is able to participate in overdose prevention. Clients interested in accessing the services of this policy will need to sign a waiver stating their consent to having their private residence entered and overdose interventions initiated if frontline staff have reason to believe the client is in danger of an acute overdose. Clients will be able to revoke this consent for frontline staff to enter their room at anytime, which will be effective immediately.
A PSA program will also be a component of this option. PSAs will participate in room checks and client monitoring in the supervised room. PSAs will always be on duty with a PSA manager to ensure that the PSAs are sufficiently supported. To ensure frontline staff and PSAs have adequate overdose response skills and access to naloxone, this option is dependent on policy 5.1: Opioid Overdose Prevention and Response Training.
5.5. Supervised Injection Room

5.5.1. Description

For this policy, a supervised injection room will be located in each facility of a supportive housing agency, and staffed based on need by an RN, PSA, and a PSA manager. All clients who are at risk of an injection–related opioid overdose will be encouraged to use the supervised injection room. Clients interested in accessing this service will need to sign a waiver stating their consent to having overdose interventions initiated if frontline staff have reason to believe the client is in danger of an acute overdose.

The PSA, PSA manager and RN will collaborate to monitor the injection room for overdoses and provide education to clients as needed. The additional benefit of having an RN present will be to dispense naloxone to frontline staff and all clients who state they are at risk for an opioid overdose, and administer oxygen to clients at risk of overdose. In addition, the room will have its own supply of naloxone from the emergency crash kit stored within. The PSA manager will also always be on duty to assist the PSA. To ensure the agency frontline staff and PSAs have adequate overdose intervention skills, this policy is dependent on policy 5.1 Mandated Opioid Overdose Prevention and Response Training.

The most appropriate room to convert for this purpose will be located within close proximity to additional frontline staffing support. The supervised injection room will have several injection stations, depending on the size of the room and the estimated demand for this service. For each injection station there will need to be a wall–mounted needle disposal, stationary lighting, a mirror, a clean surface (e.g. table), and a chair.
Chapter 6.

Criteria and Measures

6.1. Assessment Criteria

To determine the optimal policy for preventing fatal opioid overdoses in supportive housing facilities, each of the four proposed policies are assessed against four key criteria. To recount, the four policies being evaluated are: Opioid Overdose Intervention Protocol; Increase Access to Naloxone; Supervised Room; and Supervised Injection Room. The assessment criteria were determined from the interview and focus group responses and the academic literature. The four criteria used to evaluate the policies are: effectiveness, stakeholder involvement, budget, and implementation time. Each criterion is outlined in the subsections to follow and summarized in Table 6.1. These four criteria were identified as the most fundamental to address the current problem of fatal opioid overdoses in the supportive housing setting.

6.1.1. Effectiveness

The effectiveness criterion assesses how well each policy is expected to achieve the desired outcome of reducing client overdose fatalities in supportive housing facilities, and is therefore considered the key criterion in this policy analysis. There are four defined subcategories of effectiveness: reach; awareness of event; reversing overdose; and prevention. These subcategories are used to explore the range of the effectiveness criterion. The recommended policy must address each of these subcategories.

Reach

Reach is a measure of the extent to which the policy reaches the majority of persons who use opioids (PWUO) in each agency. Policies that are inclusive of the most clients at risk of an opioid overdose will score high. Policies that consist of more than one strategy aimed at reaching the most PWUO, but are still missing some
vulnerable clients, will score medium. Policies with only one strategy to reach clients and that only impact the narrowest range of clients will score low.

**Awareness of the Event**

In order to respond to an opioid overdose and prevent fatalities, frontline staff in supportive housing settings need to be aware when a drug overdose event is taking place. Policies that increase awareness of drug use allow for a more rapid response from the frontline staff, and consequently increase the likelihood of reversing an opioid overdose. Policies where frontline staff or peer staff/volunteers can directly observe clients and see when an opioid overdose happens will score high. Policies that are inclusive of clients discussing opioid use with frontline staff or peer staff/volunteers will score medium. Policies that are not inclusive of clients discussing opioid use with frontline staff or peer staff/volunteers will score low.

**Reversing Overdoses**

The reversing opioid overdoses criterion assesses whether the policy has additional components that will directly or indirectly facilitate an opioid overdose reversal. Examples of policy components that may directly facilitate an opioid overdose reversal include increasing access to naloxone at each facility and nursing staff (RNs trained to administer oxygen). Policy components that may indirectly assist an opioid overdose reversal include intercoms, phones, and/or baby monitors. Policies with additional components that directly facilitate opioid overdose reversals will score high. Policies with additional components that indirectly assist in opioid overdose reversals will score medium. Policies with no additional components that assist in opioid overdose reversals will score low.

**Prevention**

The prevention criterion captures whether the policy includes strategies to prevent an opioid overdose event from occurring. Policies with opioid overdose prevention strategies that assist frontline staff and peer staff/volunteers to engage with clients around
opioi
d overdose prevention issues will score high. Policies that do not have opioid overdose prevention strategies will score low.

6.1.2. Stakeholder Involvement

The stakeholder involvement criterion measures the involvement of clients and frontline staff with the policy. Stakeholder involvement translates into endorsement of a proposed policy, thereby optimising the chances that the intervention will lead to subsequent reductions in client opioid overdose fatalities in supportive housing.

Client Involvement

The interviewees revealed that client involvement is not required or standardized in supportive housing agencies. When client participation is not solicited, clients have no means of giving feedback or actively contributing to services that affect them. Greenwood et al. (2005) describes service models where clients are not included in the process as, “built on the assumption that poor choices have led consumers to their poor predicaments: homelessness, psychological disorganization, and so forth” (234). As a result, research by Owen et al. (1996) emphasize that consumer dissatisfaction and frustration increase with a system that tells people what they need, rather than finding out from them what they need. As a result, policies that address client involvement through paid client positions and a standardized process for client feedback will score high. Policies that have paid client positions but no standardized process for client feedback will score medium. Policies that only have volunteer client positions will score low.

Frontline staff Involvement

Frontline staff bear the bulk of responsibility to intervene in opioid overdoses in supportive housing; their involvement in the agency policy is crucial. According to research conducted by the BCCDC on staff resiliency and preventing distress after an opioid overdose reversal, there are several factors that employers can address (Amlani et al., 2015b). One of the first factors identified in this research is the “real or perceived lack of organizational support” (2). This can be mitigated by ensuring that the policy addresses frontline staff psychological support post-overdose event. In addition, agencies must be
proactive in soliciting regular feedback from frontline staff in an attempt to maximize their involvement.

This criterion reflects whether policies address frontline staff psychological support after the overdose event, and include a standardized process to elicit frontline staff feedback. Policies that address both frontline staff psychological support and staff feedback will score high. Policies that either address frontline staff psychological support or frontline staff feedback will score medium. Policies that neither address frontline staff psychological support, nor include frontline staff feedback will score low.

6.1.3. Budget

The budget criterion captures the implementation and operational costs associated with a policy. Supportive housing agencies have limited budgets, so cost is an important consideration. Currently, supportive housing agencies that are initiating opioid overdose interventions are burdened with these costs in their existing budgets. Cost estimates are determined by calculating costs of additional supplies, additional frontline staffing, and lost income due to redesign of space. Policies that cost less than $15,000 for a year of implementation will score high. Policies that cost between $15,000.00 and $65,000.00 will score medium; and polices that cost above $65,000.00 will score low.

6.1.4. Implementation Time

The fourth criterion is the amount of time estimated to implement a policy, based on the number of months. The method of analysis will be an estimate of time needed to have the policy operating at its full capacity based on both what is currently legal and the various steps (e.g. hiring additional human resources, construction, fundraising, and client involvement and feedback) required to initiate the policy. Policies that need between six months to one year will score high. Polices that are not able to be implemented within a year will score low.
6.1.5. Criterion Weighing

The criteria have differing weights based on the number of measures used in the evaluation. Effectiveness is represented through four measures, stakeholder involvement is represented as two measures, while budget and implementation time are evaluated based on a single measure. The eight measures are weighted equally, which results in the effectiveness criterion being highly weighted. Criteria definitions, measures, and score used for evaluation are listed in Table 6.1.
<table>
<thead>
<tr>
<th>Criteria &amp; Definition</th>
<th>Measure &amp; Definition</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Effectiveness</strong></td>
<td>Reach</td>
<td>High</td>
</tr>
<tr>
<td>Whether the policy can reduce client overdose fatalities in supportive housing environments.</td>
<td>Based on whether the policy impacts all clients who use opioids.</td>
<td>The policy impacts all clients who use opioids.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Medium</strong> – The policy has a couple different strategies to be inclusive, but would not impact all clients.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Low</strong> – The policy has only one strategy, and would only impact a narrow scope of clients.</td>
</tr>
<tr>
<td><strong>Awareness of Event</strong></td>
<td></td>
<td><strong>High</strong> – The policy allows frontline staff and peer staff/volunteers to observe when client drug use occurs.</td>
</tr>
<tr>
<td>Based on whether the policy creates awareness of drug use events to allow frontline staff to know when to respond.</td>
<td><strong>Medium</strong> - The policy allows frontline staff and peer staff/volunteers to know when drug use occurs.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Low</strong> - The policy does not allow for frontline staff and peer staff/volunteers to know when drug use occurs.</td>
</tr>
<tr>
<td><strong>Reversing Overdose</strong></td>
<td></td>
<td><strong>High</strong> – The policy has additional components that will directly assist in reversing an opioid overdose.</td>
</tr>
<tr>
<td>Based on whether the policy has additional components that will assist in reversing an opioid overdose.</td>
<td><strong>Medium</strong> – The policy has additional components that will indirectly assist in reversing an opioid overdose.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Low</strong> – The policy has no additional components that assist in reversing an opioid overdose.</td>
</tr>
<tr>
<td><strong>Prevention</strong></td>
<td></td>
<td><strong>High</strong> – The policy addresses opioid overdose prevention strategies.</td>
</tr>
<tr>
<td>Based on whether the policy addresses opioid overdose prevention strategies.</td>
<td><strong>Low</strong> – The policy does not address opioid overdose prevention strategies.</td>
<td></td>
</tr>
<tr>
<td>Criteria &amp; Definition</td>
<td>Measure &amp; Definition</td>
<td>Score</td>
</tr>
<tr>
<td>-----------------------</td>
<td>----------------------</td>
<td>-------</td>
</tr>
</tbody>
</table>
| **Stakeholder Involvement**  
Whether two key stakeholder groups (clients and frontline staff) are involved with the policy. | **Client**  
Based on whether paid client positions and client feedback are addressed. | **High** – Paid client positions and includes client feedback.  
**Medium** – Paid client positions but no client feedback component.  
**Low** – Only volunteer client positions. |
|  
**Frontline Staff**  
Based on whether the policy addresses frontline staff psychological support post-overdose event, and a frontline staff feedback are addressed. | **High** – Addresses frontline staff psychological support post-overdose event, and includes a frontline staff feedback component.  
**Medium** – Does not address staff psychological support post-overdose event, but includes a frontline staff feedback component.  
**Low** – Does not address frontline staff psychological support post-overdose event, or include a frontline staff feedback component. |
| **Budget**  
The implementation and operational costs associated with a policy. | **Dollars**  
**High** - Policies that cost less than $15,000.00 to implement and operate for one year.  
**Medium** - Policies that cost between $15,000.00 and $65,000.00 to implement and operate for one year.  
**Low** – Policies that cost above $65,000.00 to implement and operate for one year. |
| **Implementation Time**  
Expected time the policy will take to plan and execute. | **Months**  
**High** - Policies that take between six months and one year to plan and implement.  
**Low** - Policies that cannot be implemented within a year. |
Chapter 7.

Policy Evaluation

Using information gathered from the literature review, stakeholder interviews and focus groups, this chapter evaluates each policy option in relation to the four criteria of effectiveness, stakeholder involvement, budget, and implementation time. The policy options being evaluated are: The Opioid Overdose Intervention Protocol; Increase Access to Naloxone; Supervised Room; and a Supervised Injection Room.

Policies will be assigned a low, medium, or high score for their probability of achieving each criterion. 'High' scores will be shaded green, 'Medium' scores will be shaded yellow, and 'Low' scores will be shaded red.

<table>
<thead>
<tr>
<th>Probability of Achieving Criteria</th>
<th>Colour</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Green</td>
</tr>
<tr>
<td>Medium</td>
<td>Yellow</td>
</tr>
<tr>
<td>Low</td>
<td>Red</td>
</tr>
</tbody>
</table>

7.1. Opioid Overdose Intervention Protocol

The purpose of proposing a policy on an opioid overdose intervention protocol is to standardize practice across all supportive housing agencies. The evaluation of this policy will expose which criteria this policy is expected to meet or fall short.
Effectiveness

**Reach:** The Opioid Overdose Intervention Protocol impacts all clients who use opioids in the agency, as it is addresses all clients with this risk with no exceptions. On this basis, this policy scores high with respect to the reach criterion.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Opioid Overdose Intervention Protocol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness</td>
<td>Reach</td>
</tr>
<tr>
<td></td>
<td>High - The policy impacts all clients who use opioids.</td>
</tr>
</tbody>
</table>

**Awareness of Event:** The Opioid Overdose Intervention Protocol describes communication strategies for frontline staff and peer service advocates (PSA) to use with clients, but none are specifically focused on encouraging clients to disclose to the staff team when they are preparing to use drugs. This policy scores low with respect to the awareness of event criterion.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Opioid Overdose Intervention Protocol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness</td>
<td>Awareness of Event</td>
</tr>
<tr>
<td></td>
<td>Low - The policy does not address how frontline staff and PSAs know when client drug use occurs.</td>
</tr>
</tbody>
</table>

**Reversing Overdose:** The Opioid Overdose Intervention Protocol covers prevention and response strategies but does not have any component that helps directly in reversing an opioid overdose. This policy scores low with respect to the reversing overdose criterion.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Opioid Overdose Intervention Protocol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness</td>
<td>Reversing Overdose</td>
</tr>
<tr>
<td></td>
<td>Low – The policy has no additional components that assist in reversing an opioid overdose.</td>
</tr>
</tbody>
</table>
Prevention: The Opioid Overdose Intervention Protocol has a tool for identifying high-risk clients on intake and incorporates a careplan process when clients are identified to have a higher than usual overdose risk. Both of these elements in the protocol are opioid overdose prevention measures. Consequently, this policy scores high with respect to the prevention criterion.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Opioid Overdose Intervention Protocol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness</td>
<td>Prevention</td>
</tr>
<tr>
<td></td>
<td>High – The policy addresses opioid overdose prevention strategies.</td>
</tr>
</tbody>
</table>

Stakeholder Involvement

Client: Including client feedback in the protocol template development for the Opioid Overdose Intervention Protocol establishes the importance of client involvement. When each agency adapts the template to suit their unique setting, feedback from each agency’s clients will be required. This policy also includes paid client positions (peer service advocates, PSA). As a result, this policy scores high with respect to the stakeholder involvement criterion.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Opioid Overdose Intervention Protocol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stakeholder</td>
<td>Client</td>
</tr>
<tr>
<td>Involvement</td>
<td>High – Paid client positions and includes client feedback.</td>
</tr>
</tbody>
</table>

Frontline staff: The Opioid Overdose Intervention Protocol includes frontline staff feedback in the protocol template development, which establishes the value of frontline staff involvement from the onset. When agencies adapt the template to suit their unique setting, feedback from each agency’s frontline staff will be required. The protocol policy also addresses the need for staff psychological support post-overdose event, which will translate into staff wellbeing. With the inclusion of these two measures, this policy scores high on the frontline staff stakeholder involvement criterion.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Opioid Overdose Intervention Protocol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stakeholder</td>
<td>Frontline Staff</td>
</tr>
<tr>
<td>Involvement</td>
<td>High – Addresses frontline staff psychological support post-overdose event, and includes a frontline staff feedback component.</td>
</tr>
</tbody>
</table>
**Budget**

The costs involved in the Opioid Overdose Intervention Protocol include: the funding required for the protocol template implementation in each agency; two peer service advocate (PSA) positions, and; a 0.2 FTE (full-time equivalent) position for a PSA manager. This policy is estimated to score medium with respect to the budget criterion, as the cost for one year of operations and implementation will be between $15,000.00 and $65,000.00. See Appendix D for calculations.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Opioid Overdose Intervention Protocol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget</td>
<td><strong>Medium</strong> – Cost between $15,000.00 - $65,000.00/year.</td>
</tr>
</tbody>
</table>

**Implementation Time**

The estimated time needed for BC Housing and the health authorities to develop an overdose intervention protocol is between two to three months (which includes the time to receive and evaluate survey feedback from clients and frontline staff of supportive housing agencies). This timing is based on this researcher’s prior experience delivering a large-scale online survey in a research study. The estimated time for developing and researching ideas to assist with the creation of both an overdose risk assessment intake and care plans may take an additional two to three months. This timing estimate is based on this researcher’s experience developing clinic tools to improve outcomes of service delivery. The last phase to consider for implementation time is evaluating and adapting the protocol at each agency with the frontline staff and clients. This last phase is estimated to need three to four months for completion. This timing estimate is based on the researcher’s experience in collaborative decision making, and implementing programs in a drop-in services setting for a similar client population in a large agency (200 staff). The policy scores high with respect to the implementation time criterion, with a total projected implementation time of seven to ten months.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Opioid Overdose Intervention Protocol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation Time</td>
<td><strong>High</strong> - Between six months to a year for planning and implementation.</td>
</tr>
</tbody>
</table>
### 7.2. Increase Access to Naloxone

The Increase Access to Naloxone option is an important policy to consider as it increases the chance of naloxone being administered to the overdose victim while waiting for emergency responders to arrive. The evaluation of this policy will assess which criteria this policy is expected to meet or fall short.

**Effectiveness**

**Reach:** The Increasing Naloxone Access policy impacts all clients who use opioids, as all building occupants have 24-hour access to the naloxone in an at least one unlocked alarmed box. The policy scores high with respect to the reach criterion.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Increase Access to Naloxone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness</td>
<td>Reach</td>
</tr>
<tr>
<td>High</td>
<td>The policy impacts all clients who use opioids.</td>
</tr>
</tbody>
</table>

**Awareness of Event:** The Increase Access to Naloxone policy does not provide a means for frontline staff or client volunteers to know when client drug use occurs. Therefore, this policy scores low with respect to the awareness of event criterion.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Increase Access to Naloxone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness</td>
<td>Awareness of Event</td>
</tr>
<tr>
<td>Low</td>
<td>The policy does not allow for frontline staff and client volunteers to know when drug use occurs.</td>
</tr>
</tbody>
</table>

**Reversing Overdose:** The Increase Access to Naloxone policy has the additional component of 24-hour access to naloxone available to all building occupants. Increasing naloxone access will directly assist in opioid overdose reversals, and therefore scores high with respect to the reversing overdose criterion.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Increase Access to Naloxone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness</td>
<td>Reversing Overdose</td>
</tr>
<tr>
<td>High</td>
<td>The policy has an additional component that would directly assist in reversing an opioid overdose.</td>
</tr>
</tbody>
</table>
**Prevention**: The Increase Access to Naloxone policy does not address opioid overdose prevention strategies. This policy scores low with respect to the prevention criterion.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Increase Access to Naloxone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness</td>
<td>Prevention</td>
</tr>
<tr>
<td></td>
<td>Low – The policy does not address opioid overdose prevention strategies.</td>
</tr>
</tbody>
</table>

**Stakeholder Involvement**

**Client**: The Increase Access to Naloxone policy includes volunteer client emergency coordinators on each floor. This policy essentially relies on an unpaid client position, which does not acknowledge the time, effort, and stress involved in this role. Client feedback is a component of this policy but it does not justify the lack of payment for the time and expertise of client emergency coordinators. As a result, this policy scores low with respect to the stakeholder involvement criterion.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Increase Access to Naloxone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stakeholder Involvement</td>
<td>Client</td>
</tr>
<tr>
<td></td>
<td>Low – Only volunteer client positions, but does include a client feedback component.</td>
</tr>
</tbody>
</table>

**Frontline Staff**: The Increase Access to Naloxone policy does not address frontline staff support. It does include, however, a frontline staff feedback component in order to continually evaluate the effectiveness of this policy. As a result, this policy scores medium with respect to frontline staff stakeholder involvement.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Increase Access to Naloxone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stakeholder Involvement</td>
<td>Frontline Staff</td>
</tr>
<tr>
<td></td>
<td>Medium - Does not address frontline staff psychological support post-overdose event, but includes a frontline staff feedback component.</td>
</tr>
</tbody>
</table>
Budget

The primary cost for the Increase Access to Naloxone policy is for the alarmed wall-mount cabinets. An existing product that could be used for this purpose is an alarmed wall cabinet used for Automated External Defibrillators (AEDs). It is recommended that at least one wall-mounted cabinet for emergency naloxone be installed at each agency’s facilities. An example illustrating the cost of this policy for an agency with 22 facilities is demonstrated in Appendix D. This policy scores high with respect to the budget criterion, with an estimated cost below $15,000.00.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Increase Access to Naloxone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget</td>
<td>High – Cost less than $15,000/year.</td>
</tr>
</tbody>
</table>

Implementation Time

Waiting for Health Canada to change the federal scheduling of Naloxone is the biggest delay for the Increase Access to Naloxone policy, as a prescription medication available for public access is not currently legal. A formulary change is expected in 2016, therefore the policy has potential to be implemented within a year and scores high with respect to the implementation time criterion.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Increase Access to Naloxone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation Time</td>
<td>High - Policies that take between six months and one year to plan and implement.</td>
</tr>
</tbody>
</table>

7.3. Supervised Room

Clients are at risk for a fatal opioid overdose when they use opioid drugs alone because opioid-based drugs will cause a person to stop breathing if taken in excess (strength of unregulated drugs is not easily know) (White et al., 1999). A policy allowing for clients to inform frontline staff or client volunteer/staff when they are in need of either a room check or monitoring in a supervised room following their opioid use will help prevent clients from being alone post-opioid use and thereby help prevent fatal opioid overdoses. Observation rooms are currently being officially considered for homeless persons who use drugs (PWUD) in Boston where frontline staff are also not legally allowed
to supervise injections (Bebinger, 2015). The evaluation of this policy assesses which criteria this policy is expected to meet or fall short.

**Effectiveness**

**Reach:** The Supervised Room policy will impact only opioid-using clients who feel safe or comfortable talking with frontline staff or peer service advocates (PSA) about their substance use. This policy has two different options for overdose prevention: private room check-ins and/or a common room to be observed by frontline staff. Limitations with this policy remain, however, due to clients being required to collaborate with frontline staff; this may exclude some clients and consequently this policy only scores medium with respect to the reach criterion.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Supervised Room</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Effectiveness</strong></td>
<td><strong>Reach</strong></td>
</tr>
</tbody>
</table>

**Awareness of Event:** The Supervised Room policy involves clients being required to tell frontline staff or PSAs that they are using opioids, and subsequently allow the staff team to prepare to intervene if needed. This policy scores medium with respect to awareness of event criterion, as client drug consumption will not be directly supervised.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Supervised Room</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Effectiveness</strong></td>
<td><strong>Awareness of Event</strong></td>
</tr>
</tbody>
</table>
**Reversing Overdose:** The Supervised Room policy explores various tools (intercoms, phones or baby monitors) to assist in room checking. These components will indirectly assist and allow frontline staff to know when an overdose event might be taking place. As a result, this policy scores medium with respect to the reversing overdose criterion.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Supervised Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness</td>
<td></td>
</tr>
<tr>
<td>Reversing Overdose</td>
<td><strong>Medium</strong> – The policy has additional components that indirectly assist in reversing an opioid overdose.</td>
</tr>
</tbody>
</table>

**Prevention:** The Supervised Room policy does not address opioid overdose prevention strategies. This option scores low with respect to the prevention criterion.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Supervised Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness</td>
<td></td>
</tr>
<tr>
<td>Prevention</td>
<td><strong>Low</strong> – The policy does not address opioid overdose prevention strategies.</td>
</tr>
</tbody>
</table>

**Stakeholder Involvement**

**Client:** The paid PSA positions in the Supervised Room policy officially recognize the value clients have in opioid overdose interventions with their peers. There is no mention, however, of the agency soliciting client feedback. This policy receives a medium score with respect to the stakeholder involvement criterion.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Supervised Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stakeholder Involvement</td>
<td></td>
</tr>
<tr>
<td>Client</td>
<td><strong>Medium</strong> - Paid client positions, but does not include client feedback.</td>
</tr>
</tbody>
</table>
**Frontline Staff:** The Supervised Room policy does not address frontline staff psychological support post-overdose event, nor does it include a standardized process to elicit frontline staff feedback. This option therefore scores low with respect to the stakeholder involvement criterion.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Supervised Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stakeholder Involvement</td>
<td>Frontline Staff</td>
</tr>
<tr>
<td></td>
<td>Low - Does not address staff psychological support post-overdose event, or include frontline staff feedback.</td>
</tr>
</tbody>
</table>

**Budget**

The cost implications for the Supervised Room policy are relatively minimal. The highest potential cost is for the room used to observe clients; however there will be no additional cost if agencies use an existing common space for this purpose. This estimate considers using an existing common space, three audio baby monitors, 0.4 FTE management time (for the PSAs), and four PSAs. This option scores medium with respect to the budget criterion, with an estimated cost between $15,000.00 and $65,000. See Appendix D for calculations.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Supervised Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget</td>
<td>Medium - Estimated cost between $15,000.00 - $65,000/year.</td>
</tr>
</tbody>
</table>
Implementation Time

It is essential for the Supervised Room policy to develop guidelines for room checks based on the time it takes to overdose using varying routes of administration and other compounding factors. It is estimated to take three to four months to research these best practices from experts in the field and the literature. These timing estimates for researching and preparing guidelines are based on the researcher’s own experience with researching best clinical practices and then implementing them in a clinic setting. Gradual training of PSAs is estimated to take between three and four months. The PSA training time is estimated based on clients that have some work experience, but require time to learn and incorporate a new specific skill set required for the PSA role. Estimated time for implementation may vary between six and eight months, which is a high score for this criterion.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Supervised Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation Time</td>
<td>High - Between six months and one year.</td>
</tr>
</tbody>
</table>

7.4. Supervised Injection Room

With a supervised injection room, clients who inject opioids will inject under the supervision of trained frontline staff. A supervised Injection room could have the same success at opioid overdose reversals as the supervised injection facility Insite, in Vancouver BC. According to a Vancouver Coastal Health (VCH) spokesperson, Anna Marie D’Angelo, there have been over 1500 overdose interventions at Insite and zero deaths (Woo, 2015). The evaluation of this policy will expose which criteria this policy is expected to meet or fall short.
Effectiveness

Reach: The Supervised Injection Room policy is directed at clients who inject opioids and would be willing to inject under supervision of a nurse, frontline staff, PSAs, and/or in the company of other clients. This option is not a private service and will only be for persons who inject drugs (PWID). Because the policy is limited to this scope, it scores low for this criterion.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Supervised Injection Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness</td>
<td>Reach Low – The policy has only one strategy, and will only impact a narrow scope of clients.</td>
</tr>
</tbody>
</table>

Awareness of Event: The Supervised Injection Room policy allows for direct observation of client injections. Direct observation reduces the time to intervene in an overdose, as the client is injecting in the same room as the nurse, frontline staff, or PSAs. This policy scores high with respect to the response time criterion.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Supervised Injection Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness</td>
<td>Awareness of Event High – Allows frontline staff/PSAs to observe when drug use occurs.</td>
</tr>
</tbody>
</table>

Reversing Overdose: The Reversing Overdose feature of this policy has an RN, frontline staff, and PSAs supervising all injections in the injection room. These staff will all have access to naloxone from the emergency crash kit stored within this room, and additionally, the RN will have access to oxygen to aid in overdose reversals. This policy scores high with respect to the reversing overdose criterion.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Supervised Injection Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness</td>
<td>Reversing Overdose High – The policy has additional components that directly assist in reversing an opioid overdose.</td>
</tr>
</tbody>
</table>
**Prevention:** The Supervised Injection Room policy does not address opioid overdose prevention strategies. This option scores low with respect to the prevention criterion.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Supervised Injection Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness</td>
<td>Prevention Low – The policy does not address opioid overdose prevention strategies.</td>
</tr>
</tbody>
</table>

**Stakeholder Involvement**

**Client:** The Supervised Injection Room policy has paid PSA positions; however, client feedback is not a component of this policy. As a result, this option receives a medium score with respect to the stakeholder involvement criterion.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Supervised Injection Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stakeholder Involvement</td>
<td>Client Medium - Paid client positions but does not include client feedback.</td>
</tr>
</tbody>
</table>

**Frontline Staff:** The Supervised Injection Room policy does not address frontline staff psychological support post-overdose event, nor does it include a standardized process to elicit frontline staff feedback. This option therefore scores low with respect to the stakeholder involvement criterion.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Supervised Injection Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stakeholder Involvement</td>
<td>Frontline Staff Low - Does not address frontline staff psychological support post-overdose event, or include frontline staff feedback.</td>
</tr>
</tbody>
</table>
Budget

The estimated costs for only one facility in an agency needing a supervised injection room would include: lost revenue from room rents (a client room would need to be converted for this purpose), RN coverage, four PSA positions, 0.4 FTE (full-time equivalent) manager to support PSAs, minimal infrastructure costs. This option scores low with respect to the budget criterion, with an estimated cost above $65,000.00 for each facility in an agency. See Appendix D for calculations.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Supervised Injection Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget</td>
<td>Low – above $65,000/year.</td>
</tr>
</tbody>
</table>

Implementation Time

Due to current federal government legislation, such as the Respect for Communities Act (Bill C-2), supervised injection facility applications are administratively lengthy and burdensome. Despite this burden, VCH is currently exploring possibilities, “to apply for one Section 56 exemption from federal drug laws that will allow the health authority to offer the service at multiple sites,” (Woo, 2016). The option scores low with respect to the implementation time criterion, because implementation time is estimated to be greater than one year.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Supervised Injection Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation Time</td>
<td>Low - Polices that cannot be implemented within a year.</td>
</tr>
</tbody>
</table>
7.5. **Policy Evaluation Matrix**

The following table summarizes the combined results of the policy evaluations from Chapter 7 for ease of comparison between both the policies and criteria used to evaluate them.

**Table 7.1. Summary of all Policy Options**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Opioid Overdose Intervenion Protocol</th>
<th>Increase Access to Naloxone</th>
<th>Supervised Room</th>
<th>Supervised Injection Room</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Effectiveness</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reach</td>
<td>high</td>
<td>high</td>
<td>medium</td>
<td>low</td>
</tr>
<tr>
<td><strong>Awareness of event</strong></td>
<td>low</td>
<td>low</td>
<td>medium</td>
<td>high</td>
</tr>
<tr>
<td>Reversing overdose</td>
<td>low</td>
<td>high</td>
<td>medium</td>
<td>high</td>
</tr>
<tr>
<td>Prevention</td>
<td>high</td>
<td>low</td>
<td>low</td>
<td>low</td>
</tr>
<tr>
<td><strong>Stakeholder Involvement</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client</td>
<td>high</td>
<td>low</td>
<td>medium</td>
<td>medium</td>
</tr>
<tr>
<td>Frontline staff</td>
<td>high</td>
<td>medium</td>
<td>low</td>
<td>low</td>
</tr>
<tr>
<td><strong>Budget</strong></td>
<td>medium</td>
<td>high</td>
<td>medium</td>
<td>low</td>
</tr>
<tr>
<td>Implementation Time</td>
<td>high</td>
<td>high</td>
<td>high</td>
<td>low</td>
</tr>
</tbody>
</table>
Chapter 8.

Recommendations

This chapter focuses on the recommended policy solution for the policy problem of opioid overdose fatalities in supportive housing facilities. The analysis of the recommendation is then followed by several topics focused on opioid overdose in supportive housing worthy of consideration or further research.

Based on the analysis from Chapter 7, the Opioid Overdose Intervention Protocol policy scores the highest when assessed against the four evaluation criteria. The protocol policy scored the highest in stakeholder involvement for both clients and frontline staff. Client involvement scored high due to many structured opportunities to elicit client feedback and for including paid client staff (peer service advocates, PSA). Frontline staff involvement scored high because the protocol addressed the need for frontline staff psychological support post-overdose in addition to actively soliciting regular feedback from frontline staff. The budget criterion for the protocol policy received a medium score, however, the highest portion of the cost (beyond implementation) is the essential new PSA positions and a PSA manager. Finally, the implementation time needed for this policy is estimated to be under a year, which is the highest score for this criterion.

The Opioid Overdose Intervention Protocol scored high in only two of the four measures for the effectiveness criterion: reach and prevention. The essential measures of the effectiveness criterion not addressed by the protocol policy are: awareness of event, and reversing overdose. These two measures score the highest in the Supervised Injection Room policy; however, these measures cannot be addressed by the Supervised Injection Room policy due to the lengthy implementation time, which is undetermined but estimated at over a year due to current federal restrictions.

In contrast, the Increase Access to Naloxone and the Supervised Room policies have aspects of their policies that address these measures. For the Increase Access to Naloxone policy, the introduction of 24-hour emergency naloxone (available in each facility once the scheduling for naloxone changes in early 2016) addresses the
reversing overdose measure. The Supervised Room policy addresses both missing measures by encouraging clients to communicate drug use events with frontline staff or PSAs. The check-ins post-use are conducted by either in-person visits, or indirectly through phone calls, intercom, or baby monitors.

Adding the effectiveness features from the Supervised Room policy to the protocol policy will immediately strengthen the effectiveness criterion for the protocol policy. With the imminent naloxone scheduling changes, the 24-hour emergency naloxone can easily be added to the protocol policy to increase the effectiveness criterion. Including one or both of these measures to the Opioid Overdose Intervention Protocol will further increase the possibility of reducing opioid overdose fatalities in supportive housing.

8.1. Future Considerations

The considerations listed below were either not mentioned in the body of this research paper, or have the potential for more development as future policy considerations. All these topics are applicable to reducing opioid overdose fatalities in supportive housing.

Non-medical frontline staff as an alternative to registered nurse (RN) supervised injection rooms in supportive housing: If this alternative were legal, this would be a more affordable option (and if run by peers, more culturally appropriate) for providing supervised injection services. Either frontline staff or peer service advocates (PSA) with opioid overdose prevention and response training could provide supervision and overdose interventions.

Harm reduction as the foundation for BC Housing and the health authorities: Based on the analysis of this research, all supportive housing agencies that allow clients to use substances on site must adopt comprehensive harm reduction policies beyond simply handing out sterile injection and safer smoking supplies in order to prevent fatalities. As evidenced by the motivation for this research, when clients have access to sterile supplies but are still using alone in their room, harm is not being eliminated (risk of overdose persists) and is only reduced (for example, sterile supplies minimize exposure
to HIV and Hepatitis C). Harm reduction efforts must be focused on the essential outcome of keeping clients alive, and that can be achieved with regular training on comprehensive harm reduction policies for frontline staff, PSAs, and interested clients.

Agency Drug Policy: For clients to feel safe discussing their drug use with frontline staff and PSAs, agencies must be transparent about their drug policy. Clients need to know that they will not be threatened with eviction for seeking help with harm reduction supplies or education, overdose prevention, or emergency interventions in the case of an actual overdose. An interviewee suggested that clients’ fear of eviction due to drug use may be alleviated by changing the crime free addendum in the Residential Tenancy Act and removing the first reason for eviction listed, which is “any drug-related criminal activity” (BC Housing, 2016).

Good Samaritan Federal Law and Supervised Injection: While BC already has a provincial Good Samaritan Act, there is newly proposed federal Good Samaritan Legislation from February 2016. One of the interviewees proposed that peer supervised injections could possibly have legal protection under this law in order to prevent opioid overdose fatalities. Additionally, agency frontline staff may also supervise client injections in an effort to prevent overdose fatalities. Additional research is required to investigate how either provincial or federal Good Samaritan policy can be applied in these instances.

Broader Reach: One possible way to reach more people in housing who are at risk of overdose is for municipal governments to introduce an overdose prevention by-law that can be applied to all single resident occupancy (SRO) hotels, both private and non-profit. One way to enforce this by-law, according to an interviewee, may be the requirement of all residences that accept social assistance payments to provide standardized opioid overdose interventions.

Naloxone for supportive housing different than Take Home Naloxone (THN) kits: The naloxone availability discussed in the policies is largely dependent on the THN program. The THN program is not designed to supply organizations with naloxone; it is intended to get naloxone into communities where persons who use drugs PWUD are at risk of opioid overdoses. The simplest way to address this supply issue is for Health Canada to change the scheduling of naloxone so that it is available without a prescription.
If naloxone is made available in this capacity, supportive housing agencies will be able to order naloxone directly from a pharmacy rather than utilizing the limited resources of the THN program.

**Fentanyl detection in illicit methamphetamine (crystal meth):** This research project focuses its policies on clients who identify as being persons who use opioids (PWUO); however, a Fentanyl Urine Screen study from the BCCDC detected Fentanyl in other illicit substances, including methamphetamine (Amlani et al., 2015a). Consequently, any protocols developed to address the opioid overdose interventions must be cognizant of clients who use methamphetamine, and who may inadvertently be at risk of a fatal opioid overdose.
Chapter 9. Conclusion

Illicit drug overdose fatalities continue to rise in BC, but with the right interventions this trend can be reversed. The imminent change in naloxone scheduling by Health Canada and impending changes to legislation for supervised injection facilities will have an impact on future policy considerations. This research concluded, however, that BC Housing and local health authorities must choose an option that can be acted on immediately to slow or halt the current increase of opioid overdose fatalities. Fortunately in Vancouver, the final publication of the Vancouver Coastal Health (VCH) Second Generation Strategy for the Downtown Eastside (DTES) acknowledged the problem of increasing opioid overdoses need to be addressed immediately. Their strategy advocates for train the trainer programs in order to increase knowledge surrounding overdoses, as well as better access to naloxone. The focus on peer involvement in both training and decision-making is also emphasized throughout the entire strategy. Supportive housing has not, however, been identified as a specific area in need of this intervention.

There are numerous strategies capable of addressing the issue of rising opioid overdose fatalities. This study focuses specifically on overdose interventions within the setting of supportive housing, as this type of environment is intended to serve people with complex challenges such as substance use, mental health issues, and previous homelessness. The research recognizes that opioid overdose prevention and response training is an essential component for all frontline staff and interested clients in supportive housing. Based on a detailed analysis of that training, however, it was revealed that this option does not explicitly address the risks inherent to the supportive housing setting itself, which is the issue of clients using drugs without witnesses or supervision as they would at Insite or in a more public setting. In this scenario the chances of a fatal overdose are exponentially higher.

The purpose of this research is to demonstrate to decision makers in BC Housing and local health authorities that supportive housing is a unique setting with a significant need for opioid overdose interventions. Thus, it is the final conclusion of this study that pairing overdose prevention and response training with an opioid overdose protocol, which
addresses prevention, response and client involvement in supportive housing, is the most effective method at reducing fatal opioid overdoses.
References


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Appendix A

Interviewees

<table>
<thead>
<tr>
<th>Preliminary Interviewees</th>
<th>Confidentiality</th>
<th>Follow-up Interviewees</th>
</tr>
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<tbody>
<tr>
<td>Frontline Worker - Supportive Housing - A</td>
<td>Confidential Informant</td>
<td>Yes</td>
</tr>
<tr>
<td>Frontline Worker - Supportive Housing - B</td>
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<td>Yes</td>
</tr>
<tr>
<td>Frontline Worker - Supportive Housing - C</td>
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</tr>
<tr>
<td>Management - Supportive Housing - A</td>
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</tr>
<tr>
<td>Management - Supportive Housing/ Shelter - B</td>
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<td>Yes</td>
</tr>
<tr>
<td>Management - Supportive Housing - C</td>
<td>Confidential Informant</td>
<td>No</td>
</tr>
<tr>
<td>Management D – Supportive Housing/ Shelter - B</td>
<td>Confidential Informant</td>
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</tr>
<tr>
<td>Affiliate Worker – Social Worker – A</td>
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<tr>
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</tr>
<tr>
<td>Affiliate Worker – Registered Nurse - C</td>
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<td>Yes</td>
</tr>
<tr>
<td>Affiliate Worker – Coroner – E</td>
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<td>Yes</td>
</tr>
<tr>
<td>Affiliate Worker – Medical Director - F</td>
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</tr>
<tr>
<td>Affiliate Worker – Researcher BCCFE in HIV/AIDS</td>
<td>Confidential Informant</td>
<td>Yes</td>
</tr>
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## Appendix B

### Focus Groups

<table>
<thead>
<tr>
<th>Focus Groups – From one supportive housing agency</th>
<th>Clients</th>
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<tbody>
<tr>
<td>Supportive Housing - A</td>
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<tr>
<td>Emergency Shelter - A</td>
<td>Confidential Informants</td>
</tr>
<tr>
<td>Supportive Housing - B</td>
<td>Confidential Informants</td>
</tr>
<tr>
<td>Emergency Shelter - B</td>
<td>Confidential Informants</td>
</tr>
<tr>
<td>Drop-in Services - A</td>
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Appendix C
Housing Opiate Overdose Risk Assessment Tool (HOORAT)
HOUSING OPIATE OVERDOSE RISK ASSESSMENT TOOL (HOORAT)

WHAT IS HOORAT?
The Housing Opiate Overdose Risk Assessment Tool (HOORAT) is an assessment tool designed for drugs workers and housing workers to complete with individual clients in order to assess overdose risk stemming from opiate use. It takes the key factors associated with opiate overdose, applies weighting for some of the greater risks and provides a rough indication of level of overdose risk to which the person is currently exposing themselves.

WHY USE THIS TOOL?
The tool has a number of aims and can be used in different ways depending on the needs of your organisation. Each aim is described below.

Aim one: to assist early identification of high risk individuals
The tool was developed in response to reviews of a number of drug-related deaths in hostels, from which a number of common factors emerged. One of these was that drug deaths often occurred early in a person’s stay. All too often the risk factors that increased the chance of an overdose were there, but they hadn’t been assessed. The first aim of this tool is therefore to ensure that such an assessment happens early on in a person’s stay, to keep them as safe as possible in those early weeks. So in the short term, this tool won’t help reduce overdose, but it can help to identify those at risk of overdose so that overdoses aren’t fatal. Based on the assessment, hostels can then implement strategies to reduce the impact of overdose such as regular room inspections, the use of a ‘Red Board’ to flag high-risk residents to staff, and other targeted interventions.

Aim two: to act as a catalyst for reducing harm
The HOORAT can be used to inform approaches to harm reduction. Specific high-risk activity can be identified by the tool and then worked on by support workers. The client’s score can be used as a measure of progress, as a reduced score over time would indicate reduced risk.

Aim three: to improve organisational approaches to working with opiate users
The tool can be used to review staffing levels, inform staff training and develop policy. Organisations that routinely house residents with high HOORAT scores will need higher staffing levels to ensure an adequate staff response in the event of a critical incident. The staff and residents of these organisations will need to have received First Aid training, and overdose protocols should be in place.

Aim four: to enable referrers to identify the most appropriate type of housing for clients
A key function of HOORAT is to help assess level of overdose risk and then ensure that the person is offered housing with the correct level of support in light of that risk. People who are identified as high risk are more likely to overdose and so should be offered housing where suitable responses will be available on-site. See table over for details.
Appendix D Budget Calculations

1) Opioid Overdose Prevention and Response Training. Example estimate for 1 year of operation for a large supportive housing agency: 200 frontline staff, 800 clients, 1 internal educator and 3 client trainers (peer service advocates, PSA), 1 RN. Trainings are 2 hours in length but assume any housing frontline staff have a minimum union day of 3 hours and RNs have a minimum union day of 4 hours. Assume two PSAs and one RN to co-facilitate a training for 45 people. Frontline staff training will require one internal educator and a PSA. Client training will require two PSAs. Combine frontline staff and client training total costs for a budget estimate for one year of operation.

Wage table

<table>
<thead>
<tr>
<th>Item</th>
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<tbody>
<tr>
<td>Frontline staff and internal educator average hourly wage (Interview with Management B, 2016)</td>
<td>$21.00</td>
</tr>
<tr>
<td>PSA average hourly wage (DTES, 2015)</td>
<td>$17.92</td>
</tr>
<tr>
<td>RN average hourly wage (Registered Nurse, 2015)</td>
<td>$31.00</td>
</tr>
<tr>
<td>Stipend for clients to attend trainings</td>
<td>$20.00</td>
</tr>
</tbody>
</table>

a) Frontline staff trainings: Training 200 frontline staff with 45 people in each training would mean that this agency would need to hold five trainings, with one extra training to account for new staff, for a total of six staff trainings annually.
Frontline Staff Training Cost Table

<table>
<thead>
<tr>
<th>Item</th>
<th>pay</th>
<th># trainings</th>
<th># hours</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal educator</td>
<td>$21.00</td>
<td>6</td>
<td>(6 x3) = 18</td>
<td>$378.00</td>
</tr>
<tr>
<td>PSA</td>
<td>$17.92</td>
<td>6</td>
<td>(6 x 3) = 18</td>
<td>$322.56</td>
</tr>
<tr>
<td>RN</td>
<td>$31.00</td>
<td>6</td>
<td>(6 x 4) = 24</td>
<td>$744.00</td>
</tr>
<tr>
<td>200 Frontline staff</td>
<td>$21.00</td>
<td>1</td>
<td>3</td>
<td>$12,600</td>
</tr>
<tr>
<td>Annual Total</td>
<td></td>
<td></td>
<td></td>
<td>$14,044.56</td>
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</table>

b) PSAs: Assume 50% of the 800 clients are interested in opioid overdose prevention and response training, which would mean 400 clients are interested in training. With 45 clients per training the agency would need to hold nine trainings.

Client Training Cost Table

<table>
<thead>
<tr>
<th>Item</th>
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<th># trainings</th>
<th># hours</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSA (1)</td>
<td>$17.92</td>
<td>9</td>
<td>(9 x 3 ) = 27</td>
<td>$483.84</td>
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<tr>
<td>PSA (2)</td>
<td>$17.92</td>
<td>9</td>
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<td>$483.84</td>
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<td>RN</td>
<td>$31.00</td>
<td>9</td>
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<tr>
<td>400 Clients</td>
<td>$20</td>
<td>1</td>
<td>1</td>
<td>$8000.00</td>
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<tr>
<td>Annual Total</td>
<td></td>
<td></td>
<td></td>
<td>$10,083.68</td>
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</table>

Total Estimate Budget = $14,044.56 (frontline staff training) + $10,083.68 (client trainings) = $24,128.24

2) Opioid Overdose Intervention Protocol

Example estimate for implementing protocol in one large supportive housing agency: time for template development including compiling survey feedback from agencies (100 hours), and customizing template and implementing protocol in each agency (80 hours). Peer service advocate (PSA) and PSA manager will be a component of this policy, to identify persons who use opioids (PWUO) and to assist with care plans.
a) Average government worker hourly rate for the province of BC is $30.86 per hour (Statistics Canada, 2016). The template development cost would be a flat rate, to be covered by the funding agencies, BC Housing and the Health Authorities. The cost to launch the protocol in each agency would be:

Template development costs = 100 (hours) $30.86 = $3086.00 (covered by BC Housing and the Health Authorities)

Total estimate budget for protocol launch each agency = 80 (hours) x $30.86 = $2468.00

b) PSA manager cost = $45,000 x 0.2 FTE = $9,000.00 (Estimated manager annual salary based on one interview with Manager B).

c) PSA average hourly rate is $17.92 per hour (DTES Information, 2015). For 2 PSA positions at 12 hours a week it will be 24 hours of paid PSA time which is equivalent of 3,4 hours of coverage a day. PSA staffing would need to be continually evaluated for impact on regular frontline staff when PSAs not on shift.

Total PSA cost per week = 24 x $17.92 = $430.08

Total PSA cost per year = $430.08 x 52 = $22,364.16

Total Budget = Protocol Implementation ($2,468.80) + PSA Manager ($9,000.00) + PSAs ($22,364.16) = $33,832.96
3) Increase Access to Naloxone

The lowest cost for each alarmed wall mount unit is $170.00 (AED Universe, 2016). Assume 22 facilities in the supportive housing agency need an alarmed wall mounted box.

Total estimate budget for each agency = $170.00 x 22 = $3,740.00

4) Supervised Room

The estimated additional budget for the Supervised Room policy will include: three, $40.00 audio baby monitors (Best Buy, 2016); the manager for the PSAs will be estimated at .4 fulltime equivalent (FTE) of an average manager salary; and 4 PSAs positions at 12 hours per week.

   a) Baby monitors $40.00 x 3 = $120.00

   b) PSA manager cost = $45,000 x 0.4 FTE = $18,000 (Estimated manager annual salary based on one interview with Manager B).

   c) PSA average hourly rate is $17.92 per hour (DTES Information, 2015). For 4 PSA positions at 12 hours a week it will be 48 hours of paid PSA time which is equivalent of 6.8 hours of coverage a day. PSA staffing would need to be planned according to high need times of the day, with continued evaluation for impact on regular frontline staff when PSAs not on shift.

     Total PSA cost per week = 48 x $17.92 = $860.16

     Total PSA cost per year = $860.16 x 52 = $44,728.32

     Total estimated budget = baby monitors ($120.00) + PSA ($44,728.32) + PSA manager ($18,000.00) = $62,848

5) Supervised Injection Room
The estimated additional budget for a designated room for a Supervised Injection Room policy would mean: lost revenue from a client, registered nurse (RN) coverage, four PSA positions, part-time manager to support PSAs, minimal infrastructure costs.

a) Lost revenue from designated room: $375.00 market rate (Woo, 2013) x 12 months.

   = $45,000.00 lost annual revenue

b) RN average hourly wage is $31.00 (Registered Nurse, 2015) for 8 hours per day, seven days per week.

   = $248.00 per week

   = $248.00 x 52 = $12,896.00 per year

c) Assume minimal infrastructure additions with second hand furniture, increased lighting, cleaning supplies would range between $2000.00 - $3000.00. Assume $3000.00 for calculation.

d) PSA program same as described above in Supervised Room budget.

   Total PSA cost per year = $860.16 x 52 = $44,728.32

e) PSA manager cost = $45,000 x 0.4 FTE = $18,000.00

Total budget = lost revenue ($45,000.00) + RN ($12,896.00) + Infrastructure ($3000.00) + PSAs (44,728.32) + PSA manager cost ($18,000.00) = $120,627.3
Appendix E Policy Makers, and Other Experts in Opioid Overdose and Naloxone Interviews

1. Can I use the name of your agency employer agency or would you like it to be kept confidential?

2. What kind of work do you do that involves you with opioid overdose and or naloxone?

3. What is your understanding of the extent and scope of opioid overdose in single occupancy residencies (SROs)? Supportive housing?

4. What policy initiatives or strategies have been successful in addressing opioid overdose in SROs? Supportive housing?

5. How do you think provincial governments can further contribute to fatal overdose prevention in either of these housing settings?

6. Would you have anything different to say about municipal governments?

7. What are the key challenges facing policy-makers in addressing opioid overdose in supportive housing? What would be required to overcome these challenges?

8. What opportunities are there for partnerships among your organization, all levels of government, the health authorities, and the not-for-profit sector to properly address this issue? What would be needed for such partnerships to be established and to operate effectively?

9. What can you identify as the cost/risk to not having effective overdose management policy in supportive housing or SROs?
Appendix F Service Provider Interviews

1. How long have you been working in supportive housing?

2. What is your role?


4. Of your client population how many clients do you feel could benefit from opioid intervention strategies?

5. How is opioid use an issue in your agency?

6. Do you have formal policies for opioid overdose intervention at your agency?
   If yes:
   a. Does it address all of the following for opioid overdose: prevention, recognition, and response? If only some of these which ones and how?
      i. Prevention (addressing issues of why people use alone) ie. panic buttons, supervised injection, room check requests for people using alone, guest policy
      ii. Recognition – scheduled room checks, symptom recognition.
      iii. Response – 911, naloxone
   b. What are the challenges you faced in the implementation phase of your policy?
   c. Has this policy evolved over time or stayed the same? How?