Patient perspectives on the provision of a needle and syringe program at a large, urban acute care hospital

by

Hannah Lee Brooks

A thesis submitted in partial fulfillment of the requirements for the degree of

Master of Science

in

General Public Health

School of Public Health

University of Alberta

Abstract

Background: People who inject drugs (PWID) are at increased risk of negative health outcomes and hospitalization. Healthcare providers often struggle to appropriately manage the pain and withdrawal symptoms of PWID. PWID have described experiencing judgment and stigma from healthcare providers and also poorly managed pain and withdrawal symptoms. While hospitalized, PWID may participate in unsafe drug injection practices that place them at risk of harm and negative repercussions from staff. Needle and syringe programs (NSPs) have been shown to reduce harms for PWID in the community, yet their reach into acute care settings is currently limited. Almost no research has examined the provision of inpatient NSP for PWID. The Addiction Recovery and Community Health (ARCH) team at the Royal Alexandra Hospital (RAH) provides patients access to an acute care NSP. The present study was designed to elicit patients' perspectives on the ARCH team's novel inpatient NSP. The overall objective was to generate new insights on the acute care experiences of PWID and inpatient NSPs, and generate information useful for informing the ARCH team's and RAH's ongoing quality improvement activities.

Method: A patient-oriented research framework guided decisions made within the study. I adopted a focused ethnographic design used to study patients' perspectives and experiences. Semi-structured interviews were conducted between April 20, 2017 and January 26, 2018 with 21 inpatients who inject drugs and were under the care of the ARCH team. All interviews were conducted at the hospital, using a semi-structured interview guide that aimed to understand patients' perspectives of the RAH, the care they received, and also their perspectives of the NSP and how they felt the NSP could be improved. Interviews were recorded and transcribed verbatim. Content analysis was used for data analysis.

Results: Amongst 21 PWID interviewed, 10 were male and 16 reported accessing the inpatient NSP. Participants ranged in age from 30 to 60. Patients described both positive and negative experiences; however, a significant number of patients reported feeling judged by some members of the hospital staff. Seventeen of the patients interviewed reported injecting while hospitalized. These patients appreciated that the ARCH team provided them sterile injection supplies and felt the NSP helped reduce unsafe injection practices and also made their hospital stay less stressful. They interpreted the presence of the NSP as a sign that the ARCH team was primarily concerned with their health and wellbeing rather than their abstinence from drugs and that the team respected their autonomy. However, some patients interpreted the NSP as a trick and feared or were unaware of how accepting supplies would affect their stay. Some reported being confused about whether they were allowed to use the supplies on hospital grounds. These patients thought hospital staff might treat them in a negative manner and prematurely discharge them, or change aspects of their medication regimes if they accepted supplies. Several patients also felt the ARCH team should work to increase patient awareness of the NSP.

Discussion and Conclusion: Patients described a variety of experiences and perspectives of the hospital, unit and ARCH staff, and the NSP. Patients stated that the NSP provided them several benefits. The findings of the present study suggest the need for three main modifications to the NSP, including: a) ARCH staff should clarify how accepting supplies might affect a patients' experience at the RAH (i.e. changes to their medication regimes); b) increase awareness of the NSP by distributing pamphlets in community resource centres; and c) provide patients with a safe environment within the hospital to inject drugs and access supplies. Patients' experiences also implied or indicated a need for other types of harm reduction interventions beyond the SCS, a culture change within the hospital to reduce real or perceived stigma experienced by PWID, and improvements in how patients are informed regarding aspects of their medication regimes.

Preface

This thesis is an original work by Hannah L. Brooks [HLB]. The study was designed by HLB's supervisor, Elaine Hyshka [EH] and her co-investigators. HLB implemented the study under the guidance of EH, including refining and piloting the interview guide, completing the interviews, analyzing the data, and writing up the findings. The larger research project, of which this thesis is one component, received research ethics approval from the University of Alberta Health Research Ethics Board - HREB Panel B, Title: ARCH Team: Process Evaluation, No. Pro00053613, May 11, 2015. This project also received operational approval from the Royal Alexandra Hospital site via an application to the Northern Alberta Clinical Trials and Research Centre.

Acknowledgments

First and foremost, I would like to express my sincere gratitude to my supervisor, Dr. Elaine Hyshka, for her guidance and valuable insight throughout my time in graduate school. This thesis would not have been possible without her support. I would also like to thank my supervisory committee, Dr. Tania Bubela and Dr. Stephanie Montesanti for their time and expertise. I am also very grateful for the support of my father, mother, and sister, and also my friends and fellow students. This research would not have been possible without the support and contributions from my research participants, my co-coder Kelsey Speed, members of the ARCH team, especially Janice Pyne and Rob Gurney, the Inner City Health and Wellness Program's Community Advisory Group, and staff and leadership at the Royal Alexandra Hospital. This thesis research was made possible through research grants from the Canadian Institutes of Health Research, the M.S.I. Foundation and the Canadian Research Initiative on Substance Misuse.

Table of Contents

List of Tables

Glossary of Terms

ARCH	Addiction Recovery and Community Health team
ICHWP	Inner City Health and Wellness Program
NSP	needle and syringe program
PWID	people who inject drugs
PSW	peer support worker
RAH	Royal Alexandra Hospital
supplies	sterile injection supplies (include equipment such as sterile needles and syringes, cookers, filters, sterile water, alcohol swabs, tourniquets, acidifiers, and sharps disposal containers)

Chapter 1 Introduction

This introductory chapter includes a discussion of key concepts related to the main topic of interest — injection drug use in acute care settings and needle and syringe programs — and a problem statement for the thesis. It also briefly outlines the key knowledge gaps and research questions addressed in the thesis, and lays out the methods used for the study. Finally, I discuss changes to the needle and syringe program that occurred at the end of my research study period to provide further context for the results and the findings.

1.2 Injection Drug Use in Acute Care Settings

Research and evidence on injection drug use in Canada is diverse and includes observational, cross-sectional, and longitudinal cohort studies on associated adverse health outcomes and interventions that may reduce these harms. Epidemiological studies have estimated that 290,000 people inject drugs in Canada (Mathers et al., 2008, p. 1738). PWID do so for a variety of reasons including for stimulation, to reduce stress and anxiety, and to manage pain and mental health disorders (Degenhardt & Hall, 2012, p. 60; Sinha, 2008, p. 105; Volkow & McLellan, 2016, p. 1254). Yet this behaviour puts individuals at increased risk of contracting HIV, hepatitis C, and other blood-borne and pathogenic infections, and morbidity from physical trauma or acute toxicity. Such harms stem from the toxic effect of the drugs themselves as well as unsafe injection practices, including reusing or sharing injection equipment, injecting alone, or in unsterile semi-public or public settings, and rushed injection to avoid being discovered (Degenhardt & Hall, 2012, p. 55; Wood et al., 2001, p. 409). PWID are also more likely to be socioeconomically marginalized and to experience psychiatric disorders, criminalization, stigma, homelessness, and reduced social and vocational functioning (Haber, Demirkol, Lange, & Murnion, 2009, p. 1285-1286). Due to these various physical, social, and economic harms, PWID can experience diminished personal and

physical wellbeing and premature mortality (Degenhardt & Hall, 2012, p. 55; Dietze et al., 2010, p. 2144).

PWID often face significant social, economic, and structural barriers accessing timely and appropriate preventive health care and social services. These barriers include the prioritization of survival needs, inaccessible addiction treatment services, lack of transportation, long service wait times, and judgment and stigma from staff (Heller, McCoy, & Cunningham, 2004, p. 33; Neale, Tompkins, & Sheard, 2008, p. 147-148). PWID are thus more likely to experience acute health conditions that require immediate medical intervention and may frequently present to acute care settings for treatment (Kerr et al., 2004, p. 62). A study of 598 PWID who lived in downtown Vancouver found that 44% (n=265) of participants were frequent users of emergency department (ED) services and 35% (n=210) had been admitted to hospital more than once during a forty-month time frame (Palepu et al., 2001, p. 415). Yet current literature suggests that various aspects of the physical, social, economic, and policy contexts within acute care settings contribute to suboptimal healthcare experiences and foster a 'risk environment' for PWID, which means hospitalization may actually increase risk of harm for this population (McNeil, Small, Wood, & Kerr, 2014, p. 60; Rhodes, 2002, p. 88).

Healthcare providers in acute care settings generally lack adequate training and guidance in evidence-based strategies to treat patients with substance use disorders. In particular, they struggle to adequately manage pain in patients who use opioids regularly and have higher tolerances for these drugs (Alford, 2006, p. 2; Huxtable, Roberts, Somogyi, & Macintyre, 2011, p. 809-810; Miller, Sheppard, Colenda, & Magen, 2001, p. 411; Morgan, 2014, p. 165). Such patients require a careful pharmacological treatment approach, which may include higher doses of opioids than is usually prescribed**.** Yet healthcare providers often hesitate to prescribe or administer opioids to patients with substance use disorders for fear of being manipulated or exacerbating an existing opioid use

disorder. Physicians have also reported concerns about these patients diverting their medication either to sell or to use personally, and have reported fears of discipline by regulatory bodies (Alford, 2006, p. 3-4; Berg, Arnsten, Sacajiu, & Karasz, 2009, p. 484; Ti, Voon, et al., 2015, p. 85-86). Moreover, some healthcare providers perceive PWID as having control over their drug use, and thus bearing personal responsibility for the harm they experience and for repeated and costly hospitalizations. Healthcare providers also struggle to effectively communicate to PWID and have portrayed PWID as manipulative and untrustworthy (Brener, Von Hipple, Kippax, & Preacher, 2010, p. 1009, 1012; Haber et al., 2009, p. 1286; Lovi & Barr, 2009, p. 170, 172). As a result of these challenges, healthcare providers have reported feeling discouraged and frustrated and some acknowledge disliking providing care for PWID (Miller et al., 2001, p. 410; Van Boekel, Brouwers, van Weeghel, & Garretsen, 2013, p. 29-30).

Qualitative studies completed with hospitalized PWID indicate this population frequently encounters stigma, discrimination, and marginalization when accessing care. Participants have described instances where hospital staff dismiss their descriptions of symptoms or pain, and label their requests for pain relief as aberrant 'drug-seeking' behaviour (Buchman, Ho, & Illes, 2016, p. 1399; McNeil et al., 2014, p. 62; Pauly, McCall, Browne, Parker, & Mollison, 2015, p. 122, 127). PWID subsequently experience undertreated withdrawal symptoms and pain while hospitalized. They are also more likely to be involuntarily discharged or discharged against medical advice and be frequently readmitted to hospital for delayed, lengthy, and costly stays (Breitbart et al., 1997, p. 235; Hwang, Li, Gupta, Chien, & Martin, 2003, p. 418; Ti, Milloy, et al., 2015, p. 5-6).

The relationship between providers and recipients of healthcare is complex and measures to define and evaluate levels of trust within this relationship vary (Hall et al., 2002, p. 293-294). Nevertheless, extant literature suggests that PWID and their healthcare providers experience significant levels of mutual mistrust (McNeil et al., 2014, p. 62; Merrill, Rhodes, Deyo, Marlatt, &

Bradley, 2002, p. 327). Tenuous patient-healthcare provider relationships are exacerbated by aspects of the medical model of acute care where patient-healthcare provider relationships are predicated on a hierarchical power structure. Healthcare providers possess expert knowledge and dispense care and directives to patients, and in return patients are expected to comply with their orders and remain passive participants in their care plan (Heller et al., 2004, 36). Hospitals and healthcare providers also set social and behavioural parameters for hospitalized patients, one of which is abstinence from drug use. Some PWID may comply and refrain from drug use with little difficulty. For others, however, abstaining from drug use may result in uncontrolled pain, cravings, and withdrawal symptoms. Patients may be offered pharmacological therapy, such as opioid agonist treatment, and specialized withdrawal and pain management, but more commonly they could expect to cope with symptoms without adequate support (Heller et al., 2004, 36-37; McNeil et al., 2014, 64).

Despite common prohibitions against drug use in acute care settings, PWID often continue to inject drugs while hospitalized (McNeil et al., 2014, 62; Grewal et al., 2015, p. 499). Ongoing injection drug use in hospital settings may be due to various factors, including to reduce unmet pain needs and inadequately managed withdrawal symptoms, but also habit and the desire to minimize the symptoms of acute stress, anxiety, or psychiatric disorders (Grewal et al., 2015, pg. 500, 502; McNeil et al., 2014, 62). When a patient is caught injecting, healthcare providers can interpret these actions as defiance towards their authority, or noncompliance with the standard treatments of mandated abstinence or pharmacological therapy. These healthcare providers often attempt to penalize or control the patient's actions and conflict and increased harm to the patient can result including involuntary discharge and leaving against medical advice (McNeil et al., 2014, p. 60, 62-64; Rachlis, Kerr, Montaner, & Wood, 2009, 1; Szott, 2014, 651). In a study of 30 PWID living in Vancouver who had been recently hospitalized, participants reported being under constant suspicion and surveillance from healthcare providers and described hospitals as "prisons" and healthcare

providers as "cops" (McNeil et al., 2014, p. 62). Participants secretly injected in washrooms or outside the hospital, and some reused non-sterile injection supplies in order to reduce the risk of being discovered, reprimanded, or involuntarily discharged (McNeil et al., 2014, p. 62).

Several interventions have been recommended to transform acute care settings from environments that potentially induce harms to those that reduce harms for PWID (Moore & Dietze, 2005, p. 276; Rhodes, 2002, p. 91). Examples of these recommended interventions include blended pain and addiction management education for healthcare providers and the incorporation of addiction counselling into acute care (Merrill et al., 2002, p. 331). It has also been suggested that integrating patient-centred care into acute care settings could improve the health and wellbeing of PWID. Patient-centred care aims to improve "the health outcomes of individual patients in every day clinical practice, taking into account their preferences, objectives, and values" (Sacristan, 2013, p. 2). As opposed to the traditional medical model of care, patient-centred care entails the active participation of patients in decisions regarding their care (Table 1). Examples of patient-centred care could include incorporating cultural health practices or greater educational or communication tools into clinical settings (Sacristan, 2013, p. 1-2; Stewart, 2001, p. 445). Patient-centred care could also entail integrating harm reduction practices into acute care, which would emphasize a patient's overall emotional and physical wellbeing over drug abstinence and prioritize a patient's chosen personal and health goals (Pauly et al., 2015, p. 133; McNeil, Kerr, Pauly, Wood, & Small, 2015, 686, 688; Rachlis et al., 2009, p. 2).

Table 1. Characteristics of the medical model of care and patient-centred care

	Medical Model of Care	**Patient-centred Care**
Founding principles	Principles of charity and authoritarianism	Principle of autonomy
Structural philosophy	Hierarchical chain of command	Shared decision making
Locus of control	Physician	Patient
Orientation of care	Disease	Patient
Physician role	Dispense treatment and expect adherence	Provide information and seek collaborative decision-making
Patient role	Accept and adhere to treatment	Understand options and participate in decision making

(Heller et al., 2004, p. 36; Sacristan, 2013, p. 2)

1.3 Needle and Syringe Programs

Harm reduction is an umbrella term for various policies and practices that aim to reduce the harms associated with psychoactive substance use without requiring people who use drugs to reduce or eliminate their consumption. The underlying assumption is that some people who use psychoactive substances will have periods of time where they are unable or unwilling to stop drug use, and that modifying certain unsafe drug use practices or settings should take precedence over enforcing abstinence (Csiernik, Rowe, & Watkins, 2017, p. 29; Lenton & Single, 1998, p. 216). Needle and syringe programs (NSPs) are considered an essential harm reduction approach to reducing the risks associated with injecting drugs. NSPs typically dispense free sterile injection supplies, including needles and syringes, cookers, filters, alcohol swabs, tourniquets, acidifiers, sharps disposal containers, and water for converting drugs to an injectable solution. NSPs can also supply non-judgmental safer injection education and provide referrals or direct access to social and health supports (Csiernik et al., 2017, p. 34; Strike et al., 2006, p. 40-49, 59; Vlahov, Robertson, &, Strathdee 2010, p. S115). Informal syringe distribution programs in Canada began in Montreal, Toronto and Vancouver in 1988. In 1989, the federal Ministry of Health collaborated with five provinces to implement eight official NSPs across the country. NSPs are endorsed by the World

Health Organization, United Nations Office of Drug Control, and the Joint United Nations Programme on HIV/AIDS and as of 2016, 90 countries and territories across the world provide some form of NSP (Hankins, 1998, p. 1133; Stone, 2016, p. 9; World Health Organization, 2009, p. 10).

Evidence demonstrates that blood-borne infection transmission rates and other risks associated with unsafe injection practices can be reduced when NSPs are scaled-up in a timely fashion and adequately cover the injecting population in a particular location (Abdul-Quader et al., 2013, p. 2889; Degenhardt et al., 2010, p. 285-286, 295; Vlahov et al., 2010, p. S115). NSPs may also engender trust and promote communication between PWID and healthcare and service providers and have been noted to facilitate PWID accessing housing, health, and social supports (Heimer, 1998, p. 189; Macneil & Pauly, 2011, p. 30-31; Treloar, Rance, Yates, & Mao, 2016, p. 143). In qualitative studies, clients of NSPs have described them as "supportive, comfortable, and safe" (Macneil & Pauly, 2011, p. 29) locations where they felt like "any other person" (Treloar et al., 2016, p. 143). Service providers were described as non-judgmental and clients describe being more willing to trust the providers and services they provide (Macneil & Pauly, 2011, p. 31; Treloar et al., 2016, p. 143).

1.4 Rationale for Study

NSPs have been widely implemented across community settings in Canada. However, when PWID are hospitalized in acute care settings, they lose access to sterile injection supplies and other harm reduction supports that an NSP provides (Strike, Guta, de Prinse, Switzer, & Chan, 2014, p. 641). Many acute care settings in North America continue to adhere to the medical model of care, which places the locus of control in the hands of healthcare providers who expect abstinence from substance use, and compliance to hospital rules and norms. Substance use disorders are perceived

through a disease framework and continued substance use as deviance from treatment expectations (Heller at al., 2004, p. 36). However, certain researchers and healthcare providers have acknowledged that this model of care fails to meet the needs of PWID (McNeil et al., 2014, p. 60). Recent studies have suggested that incorporating harm reduction interventions, including an acute care NSP that accommodates drug use and provides sterile injection supplies to PWID while they are hospitalized, is a form of patient-centered care for this population, and may reduce injection-related harms and rates of premature discharge, and improve the relationship between PWID and their healthcare providers (Pauly et al., 2015, p. 133; McNeil et al., 2015, 686-89; Rachlis et al., 2009, p. 2; Ti, Buxton, et al., 2015, p. 303).

Knowledge gap. No formal study has been conducted on an acute care NSP and published in the English-language peer reviewed literature. Researchers have completed studies on certain harm reduction programs integrated into healthcare services, although each of these models differs significantly from an acute care NSP. Specifically, studies have been conducted on one outpatient NSP located adjacent to an acute care setting in the United States (Masson et al., 2007, p. 98-100; Masson et al., 2010, p. 902-903). Studies have as well been conducted on an NSP in a specialized sub-acute HIV care facility in Canada (Strike et al., 2014, p. 642) and on a supervised consumption service (SCS) located within a specialized sub-acute HIV care facility also in Canada (Krusi, Small, Wood, & Kerr, 2009, p. 638). The distribution of sterile injection supplies in acute care settings has been noted to occur in some parts of the United States (Cleland et al., 2007, p. 392), the United Kingdom (Jones, Pickering, Sumnall, McVeigh, & Bellis, 2008, p. 49), Australia (Stokes, 2014, p. 3), and Canada (Hankins, 1998, p. 1136) although details on these programs or their administration are scant.

Study setting. The Royal Alexandra Hospital (RAH) in Alberta, Canada recently established a formal acute care NSP. The RAH is a large tertiary hospital with approximately 850 beds, that

provides care to a substantial number of people annually from across Alberta and north-western Canada. The RAH is located in the inner core of downtown Edmonton and its proximity to the inner city and its status of one of two trauma centres in Edmonton, means that the hospital sees a large number of unstably housed and lower-income individuals with complex health and social needs, and high rates of substance use disorders. The RAH's ED is one of the busiest in Canada and the inpatient building that houses over half of the total inpatient beds is often filled to capacity (Royal Alexandra Hospital Foundation, 2016, p. 1; Royal Alexandra Hospital Foundation, 2018a, p. 1).

In 2013, the Inner City Health and Wellness Program (ICHWP) was launched at the RAH. ICHWP has three arms: a clinical arm called the Addiction Recovery and Community Health (ARCH) team, an education arm led by a clinical nurse educator, and a research arm led by two faculty members from the University of Alberta.

The ARCH clinical team (henceforth known as the ARCH team) comprises physicians, nurse practitioners, addiction counsellors, social workers, and peer support workers. The ARCH team supports RAH clinical staff in caring for patients by providing specialized services for people with substance use disorders. These services include management of complex intoxication, withdrawal, and/or pain symptoms; initiation or maintenance of opioid agonist treatment; and screening for sexually transmitted and blood borne infections. Patients are also offered substance use counselling; housing, income and identification supports; relapse prevention and treatment referrals; access to an acute care NSP; and, since April 2018, access to an SCS. The ARCH team follows a patient-centred and harm reduction model of care where they participate in collaborative decision making with patients and celebrate incremental progress instead of requiring immediate adherence to addiction treatment plans or drug abstinence (Heller et al., 2004, p. 36).

The ARCH team began providing its hospitalized inpatients access to sterile injection supplies (henceforth known as the NSP) in the fall of 2014 after noticing that hospitalized inpatients were contracting recurrent infections due to injecting with non-sterile injecting supplies. Prior to ICHWP's launch and prior to initiating the NSP, ICHWP leadership consulted with people with lived experience of injection drug use, who had been hospitalized while actively injecting. ICHWP leadership wanted to understand what people with lived experienced thought about the idea of having an acute care NSP. During these consultations, those with lived experience explicitly stated a need for sterile injection supplies to be distributed to hospitalized inpatients. They also provided guidance regarding how the ARCH team could offer supplies to patients and which supplies should be distributed.

Access to the NSP is available to all ARCH patients. The NSP is unique in that active drug use is acknowledged and accommodated (rather than ignored or used as a reason to discontinue hospital care) and sterile injection supplies, safer injection education, sharps containers, and safe disposal instructions are provided to patients while they remain hospitalized. Supplies are typically offered by an ARCH physician or nurse practitioner when a patient reports recent or active injection drug use during their intake with the ARCH team. However, supplies can be offered and distributed any time a patient discloses active injection drug use or requests supplies. Supplies can be dispensed by the ARCH physician or nurse practitioner, although they are typically dispensed by the ARCH social workers, addiction counsellors, and especially, the peer support workers. The later are allied health professionals that work with the ARCH team and have lived experience of substance use and marginalization. When supplies are dispensed to a patient, members of the ARCH team note the administration of 'harm reduction supplies' in the patient's hospital chart. This information is available to all RAH healthcare providers caring for that patient and patients are informed of this fact.

In 2013, Alberta Health Services, the provincial health authority for the province of Alberta, passed a 'Level 1 policy' recognizing that harm reduction is an appropriate approach across the spectrum of care for people who use psychoactive substances (Alberta Health Services, 2013, p. 1). However, this policy did not explicitly require Alberta Health Services staff and other healthcare providers to incorporate harm reduction strategies into their care practice. Physicians and other healthcare staff are still able to use clinical discretion to make independent decisions on how to manage behaviours of PWID. If healthcare staff suspect or verify that a patient is injecting drugs, or if a patient is perceived as rude or aggressive, healthcare staff may declare that patient as non-compliant, make changes to the patient's care plan, or discharge the patient (Martin et al., 2018, p. 15).

Little has been published and no official guidance exists regarding the implementation of NSPs within hospital settings. As such, the ARCH NSP was necessarily developed *ad hoc*. As a result, research and evaluation are required to ensure that the implementation of the NSP has been successful. Given past evidence of negative acute care experiences amongst PWID, it is particularly important to understand the new program from the patient's perspective. However, prior to this study, it was unclear how patients were experiencing the NSP. In order to fill this research gap, I conducted a qualitative study of ARCH's NSP between the spring of 2017 to the winter of 2018. I wanted to understand the experiences of PWID at the RAH, including how these patients perceived the NSP, whether any barriers existed for them in accessing supplies, and what changes could be made to reduce those barriers, facilitate supply distribution, and improve hospital care.

1.5 Research Questions and Objectives

My research was guided by the following research questions:

1. How do ARCH patients who inject drugs experience care at the RAH?

2. How do ARCH patients who inject drugs perceive the acute care NSP?

3. From the patients' perspectives, what modifications or improvements can be made to the NSP?

My overall research objective was to build new knowledge on PWID's acute care experiences and inpatient NSP provision, and generate insights useful for facilitating quality improvement of the ARCH team model of care and the RAH.

1.6 Significance of Research

I completed a brief search in two academic journal databases (CINAHL Plus© and MEDLINE©) and I found no formal studies conducted on an acute care NSP that have been published in the English-language peer-reviewed literature.

My study was the first research project on one of Canada's first formal NSPs in an acute care setting. This research has the potential to improve care for patients at the RAH, and generate new knowledge on caring for PWID in acute care settings using a harm reduction or patient-centered care approach.

1.7 Supervised Consumption Service at the Royal Alexandra Hospital

When this research study began, the ARCH team was quite small. There were several physicians, but only one nurse practitioner, peer support worker, addiction counselor, and social worker. As my study was being finalized, the size of the ARCH team more than doubled. There are now more physicians, nurse practitioners, addiction counselors, social workers, and peer support workers. The ARCH team and RAH also worked together to establish an SCS in April 2018 for ARCH inpatients and built safes in each room where patients could store drugs and injection supplies safely and securely (Royal Alexandra Hospital, 2018b, p. 3). While the distribution of

injection supplies to inpatients continues, most patients are now typically encouraged to pick up supplies themselves at the SCS, and inject there, rather than taking them to their rooms, other parts of the hospital, or off-site. Sterile supplies are available 24/7 from the SCS, and use of the SCS is not required to access supplies.

SCSs were first developed in the 1980s in Europe, and as of 2016 there were 90 SCSs throughout Western Europe, Australia, and Canada (Stone, 2016, p. 18). Recently, several SCSs have been established in Canada, including the SCS in the RAH. SCSs provide PWID services similar to NSPs, including sterile injection supplies, safer injection information, and access to health and social supports. However, the sites also provide sterile spaces where they can consume drugs under the supervision of staff trained to provide safer injection support and education, and reverse drug overdoses. SCSs aim to improve the health and wellbeing of PWID by reducing rates of drug overdoses, injection-related infections, and practices related to public injecting, such as rushed injecting, and connecting PWID to health and social supports (Kerr, Small, Moore, & Wood, 2007, p. 44; Potier, Laprevote, Dubois-Arber, Cottencin, & Rolland, 2014, p. 49).

The inpatient SCS established by ARCH at the RAH and the recent additions of safes in patients' rooms may affect how the results of my study can be utilized because patients may now have a safer place to inject and store their drugs and injection supplies. Nevertheless, my thesis was written describing the ARCH team and the care they provide to PWID and the NSP as it was during my data collection period.

1.8 Chapter conclusion

PWID can experience significant health risks when receiving care in hospital settings. NSPs in community settings reduce risks for PWID, but evidence of their presence in acute care settings is minimal. Therefore, I completed a study to explore how patients perceived ARCH's acute care NSP

and how it did or did not impact their hospital experience, and to generate insights for improving how the NSP functions.

Chapter 2 Methodology

A study's methodology encompasses the lens through which each decision in a study is made. In order to guide my decisions and ensure coherence within my study, I used a patient-oriented research methodology. In this chapter, I will define patient-oriented research and describe how I designed and implemented my study and analysed and presented my results (Mayan, 2009, p. 13, 30-31).

2.2 Research Framework

I chose patient-oriented research as my study's framework. Patient-oriented research denotes research that meaningfully incorporates patients into the research process. It was developed to deliver timely, cost-effective, and beneficial health interventions directly to the point of care and identify interventions and outcomes considered important by patients. Investigators then evaluate the measures identified by patients to determine which aspects are the most effective for particular subsets of patients (Canadian Institutes of Health Research, 2011, iii, 1-2). Patient-oriented research can be conducted by investigators from diverse backgrounds and within a variety of healthcare systems and research methods may incorporate quantitative or qualitative data collection strategies. Studies are not restricted to a particular theoretical paradigm; however, methodologies should emphasize the heterogeneity of populations to be analyzed, the comparative effectiveness of interventions, and the disaggregation of results (Canadian Institutes of Health Research, 2011, iii, 1-2; Sacristan, 2013, 4).

I chose a patient-oriented framework because the NSP is a patient-centred health intervention. Patient-centred interventions aim to provide services indicated by patients as important. ICHWP leadership began to distribute sterile injection supplies only after consulting with people with lived experience, during which it was explicitly stated that hospitalized PWID at the

RAH needed access to sterile injection supplies (Sacristan, 2013, p. 2; Stewart, 2001, p. 445). Prior to my study, however, patients' perceptions of how the intervention was enacted and what improvements could be made were unknown. I directly spoke to patients with experience of being offered or accepting supplies from the NSP in order to capture their first-hand knowledge and advice.

In parallel with these interviews, I consulted and collaborated with members of the ICHWP Community Advisory Group, who have lived or living experience and expert knowledge regarding using drugs and being hospitalized in acute care settings. Most members also identify as being of Indigenous descent. At the beginning of my project, I met with two members and piloted my interview guide. During my data collection period when I had preliminary results but hadn't completed data analysis, I met with five Community Advisory Group members and one-by-one, discussed several of the salient categories uncovered in my analysis. Finally, at the end of my analysis I met with Community Advisory Group members again to further discuss other categories and highlighted themes. All members concurred with the patients I interviewed, and described having similar experiences. No new themes emerged during my meetings with this group.

Adopting a patient-oriented research framework allowed me to assess patients' perceptions of the NSP and also synthesize ways the ARCH team could modify aspects of the NSP to ensure patients were able to access supplies at the right time.

2.3 Research Approach and Methods

Although a patient-oriented research framework is amenable to a variety of research methods, I chose a qualitative research method to answer my research questions. A research method can be seen as "a collection of research strategies and techniques based on theoretical assumptions that combine to form a particular approach to data and mode of analysis" (Richards & Morse, 2007,

p. 2). I chose a qualitative method because my main goal was to understand patients' perceptions and qualitative research has the essential goal of eliciting, describing, and understanding a person's perspective of a situation (Richards & Morse, 2007, p. 30; Mayan, 2009, p. 11).

I selected focused ethnography as my qualitative research method. Traditional ethnography enables a researcher to extract implicit and explicit aspects of a cultural group and present rich and detailed descriptions of those aspects from the perspective of the subjects under study (Richards & Morse, 2007, p. 57; Mayan, 2009, p. 37). Although various definitions of culture exist, LeCompte & Schensul (1999) describe culture as the "beliefs, behaviours, norms, attitudes, social arrangements, and forms of expression that form describable patterns in the lives of members of a community or institution" (p. 21). Focused ethnography is a more targeted and time-limited form of ethnography that is conducted within a distinct cultural group or context familiar to the researcher. Subjects under study may not know each other, but all share a common experience. Data collection strategies in focused ethnography stress the importance of understanding participants' emic perceptions of a particular setting or situation (Mayan, 2009, p. 11, 37; Rashid, Caine, & Goez, 2015, p. 9; Wall, 2015, p. 4-5). The goal in focused ethnography is to answer specific research questions guided by data identified prior to the study commencement in order to resolve a particular problem (Cruz & Higginbottom, 2013, p. 38; Knoblauch, 2005, p. 5-6, Mayan, 2009, p. 39; Richards & Morse, 2013, p. 58).

Focused ethnography was an appropriate method to answer my research questions for the following reasons. First, my goal was to understand patients' perceptions of the NSP and how they felt the NSP could be modified or improved. In order to answer these research questions, I needed to use inductive modes of data collection that allowed me to directly converse with ARCH patients, which focused ethnography utilizes.

Second, research suggests that acute care settings comprise distinct patterns of norms and behaviours and healthcare providers possess particular patterned beliefs regarding PWID (LeCompte & Schensul, 1999, p. 21; Lovi & Barr, 2009, p. 170; McNeil et al., 2014, p. 61). Research also suggests that the social networks of PWID have a unique set of behaviours, norms, and language as well (Hawkins & Fraser, 1985, p. 7; Suh, Mandell, Latkin & Kim, 1997, p. 141). I knew, therefore, that in order to understand how patients experienced the NSP I also had to understand their experiences of being part of the culture of PWID and their experiences of being PWID within the RAH culture. Focused ethnography allowed me to accomplish this by providing me a structure which I could use to focus my research questions on the NSP but position the questions within the boundaries of the culture of both the participants and the RAH.

Third, focused ethnography requires the researcher to be familiar with the culture, both of the participants and the cultural context in which the study is to be conducted. It was therefore a convenient method for me to use because I had worked with PWID for many months through volunteering at the Boyle Street Community Services with Streetworks and their NSP evening distribution van. I had also worked within the RAH and with ARCH patients and the ARCH team for several months prior to data collection (Richards & Morse, 2007, p. 58). Finally, the primary goal of patient-oriented research is to improve the delivery of health interventions and the method of focused ethnography has precedence within health research as a practical approach to accomplish exactly this (Higginbottom, Pillay, & Boadu, 2013, p. 2; Rashid & Caine, 2015, p. 3).

2.4 Data Collection

I employed semi-structured interviews as my data collection tool. A semi-structured interview is conducted by using a set of predetermined open-ended questions that are tailored around a particular topic. All participants are generally asked the same questions, although different

prompts and follow-up questions are used for clarification and other questions can emerge during the dialogue. The goal of semi-structured interviews is to elicit detailed and rich information in a short period of time (Higginbottom et al., 2013, p. 5; Mayan, 2016, p. 71). I chose this tool because semi-structured interviews are an inductive approach to capturing patients' emic point of view of the NSP (Mayan, 2009, p. 11, 39). There is precedence for utilizing semi-structured interviews in focused ethnographies (Cruz & Higginbottom, 2013, p. 38; Graham & Connelly, 2013, p. 333; Mull, Agran, Winn, & Anderson, 2001, p. 1083; Nightingale, Sinha, & Swallow, 2014, p. 4). Unstructured and other less structured interviews are generally utilized when the researcher has minimal knowledge about a situation and it is often necessary to have one or multiple follow-up interviews (Olson, 2011, p. 36; Rubin & Rubin, 2005, p. 4). I would not have had the opportunity to conduct follow-up interviews due to the challenges in tracking down unstably housed patients for follow-up interviews post-discharge (Conover et al., 1997, p. 91). Finally, other data collection tools, such as observations, focus groups, and photovoice, would not have been appropriate given privacy constraints within the RAH, the private nature of injection practices, and my particular research questions.

The interview questions within my interview guide were organized around my research questions, which were to understand how patients perceived the RAH and the NSP and what modifications could be made to the NSP to enhance its services (Appendix 1.0). I drafted a main set of questions to ask to all patients. These questions focused on their experiences at the RAH and with ARCH. I then drafted two different sets of additional questions to ask patients, one set of questions was used if they accepted supplies from the NSP and one set of questions was used if they did not. Previous process evaluation work completed by members of the ICHWP research team, my prior experience working with ARCH patients, and extant literature on the acute care experiences of PWID also provided me guidance in drafting the interview questions. The interview questions were

also drafted with a particular set of assumptions: a) patients have a basic familiarity with NSPs and may be able to compare the ARCH NSP to community-based NSPs; b) patients' experiences with ARCH's NSP are memorable and patients are interested in discussing the program; and c) patients have formed certain opinions about acute care settings and healthcare providers and are interested in sharing those opinions.

The next step I took was to circulate the interview guide to other investigators on the research project. After all revisions had been received, I piloted the interview guide with two members of the Community Advisory Group and modified questions to reflect their suggested wording.

Sampling. I conducted purposive sampling and recruited inpatients who reported recent injection drug use to the ARCH physician or nurse practitioner and had been offered and accepted supplies or had been offered and refused supplies (Barbour, 2001, p. 1115-1116; Richards & Morse, 2007, p. 75; Ritchie & Lewis, 2003, p. 78-79). Although the ARCH team treats both inpatients and outpatients, I collected data from inpatients only. Outpatients are able to meet with ARCH staff members and pick up sterile injection supplies to use when and where they choose. ARCH inpatients are technically constrained to injecting off of hospital grounds, however many may choose, or are forced due to physical limitations, to inject in their rooms or on hospital grounds. ARCH inpatients also must store their sterile injection supplies in their hospital room and risk being discovered injecting in their room or having their supplies found by various healthcare providers and staff. My research aimed to understand their perspective of this situation. I also primarily recruited inpatients who accepted sterile injection supplies. However, in order to better capture various perspectives on the NSP, I also recruited several patients who were offered supplies but refused them. And although the determination of sample size in qualitative research is often contextual and dependent on the method chosen, I aimed to recruit patients until either theoretical saturation was

reached, meaning no new concepts or themes emerge in subsequent interviews, or the benefit of further recruitment was marginal (Boddy, 2016, p. 426; O'Reilly & Parker, 2012, p. 192; Ritchie & Lewis, 2003, p. 83-84).

Recruitment. The ARCH team asked patients that met the eligibility criteria if they would be interested in learning more about a drug use research project. The ARCH team then provided the patients' names and room numbers to me and I confidentially approached each patient, explained the project, and asked if they wanted to participate. All interviews were audio recorded. I interviewed nearly all patients ARCH staff members recommended. Some patients I could not physically find, despite multiple attempts, while one patient declined to participate. Certain patients felt uncertain about interviewing with me at first, so to build trust I would check in on them a few days later or I would sit down and chat with them about anything that was of interest to them (Ritchie & Lewis, 2003, p. 163). All patients received a $20.00 cash honorarium for their time. This honorarium practice has taken place in other research with PWID in Edmonton and also at the RAH (Hyshka, Anderson, Wong, & Wild, 2016, p. 6; Salvalaggio, Dong, Hyshka, & Nixon, 2016, p. 34).

Between April 20, 2017 and January 26, 2018, I interviewed 21 patients. I stopped after Patient 21 because theoretical saturation had been reached. While completing iterative coding of transcripts of Patients 19, 20, and 21, aside from Patient 20 describing discrimination against transgender patients, I created no new codes.

I utilized two main types of questions in the interviews: content mapping and content mining questions. Content mapping questions introduce topics related to the interview questions. They can have a wide scope and therefore allow the participant to respond in a variety of ways. Content mapping questions are used to elicit details regarding a particular topic. They can also be

used in the beginning of the interview to break the ice and also gauge the participant's willingness or ability to even discuss the topic (Ritchie & Lewis, 2003, p. 148).

Examples of content mapping questions included:

a. What brought you to the hospital?

b. How do you feel the staff have treated you?

c. What do you think about the Royal Alex having a needle exchange program?

Content mining questions are more specific and are used to elicit greater detail, fill in missing information, or clarify a particular topic (Ritchie & Lewis, 2003, p. 148).

Examples of content mining questions included:

a. Is it okay if I ask why or why not?

b. How did you feel when the nurse said that?

c. I'm sorry, just so I can understand, the nurse found your supplies when?

After each interview, I wrote my impressions of the patient and the interview itself, any specific thoughts or reflections about a topic discussed in the interview, and any notes for myself going forward in a reflective journal. The goal of this reflective journal was to aid data analysis although the text itself would not be analysed (Miles & Huberman, 1994, p. 66).

While I attempted to ask all questions in my interview guide to all patients, particular circumstances resulted in certain patients not being asked all questions. A few interviews had to be shortened or continued after a short break due to patients becoming drowsy or the rapid return of pain or other symptoms, patients displaying discomfort or a dislike for particular questions, interruptions by RAH or ARCH staff, or by patient request. Ultimately, the average length of the interviews was 51 minutes.

Although my questions and the overall theme of the interviews remained focused on the NSP and their experiences in the RAH, I attempted to maintain a flow to the interviews similar to a conversation. I accomplished this by initiating and ending the interviews with unrelated casual talk, maintaining a pleasant but respectful tone in my voice, and remaining attentive to their body language and modifying the speed of the interview and type of questions asked as needed (Higginbottom et al., 2013, p. 5; Rashid et al., 2015, p. 4). At certain points, some patients became emotional or expressed frustration and anger. When this occurred I always asked if they wanted me to pause or stop the interview or move on to a different question. While I attempted to remain impartial and objective in my responses, this was not always immediately possible. After a few moments, however, I did always attempt to compose myself and continue the flow of the interview (Higginbottom et al., 2013, p. 5; Ritchie & Lewis, 2003, p. 20, 162).

2.5 Ethics

My research study is part of a larger mixed-method exploratory study of ARCH's NSP. The study has ethics approval from the University of Alberta's Health Research Ethics Board (Panel B) and received operational approval from the Royal Alexandra Hospital site via an application to the Northern Alberta Clinical Trials and Research Centre.

Prior to commencing each interview, I carefully and slowly explained the study consent form to patients. It was clear to me early on that several patients were not able to independently read the form due to their poor physical condition or struggles with reading, so for all patients I carefully summarized the form in clear language line by line while pointing to each section. I emphasized that what they told me would be confidential from all RAH and ARCH staff members, and I also made it clear that they could stop the interview at any time (Van den Hoonard, 2013, p. 36).

All interviews were conducted in a safe location of the patient's choosing. Although I attempted to primarily interview patients in a quiet and private location such as their room, interviews also took place in a corridor, lobby, parking garage, storage room, and outdoor benches and smoking areas. When interruptions occurred, I always paused the recorder, although I attempted to maintain flow and consistency within the interview. A few times a patient's partner entered into the room and stayed. Every time this occurred, I paused the recorder and asked the patient quietly so their partner could not hear if they wanted to continue later. Each time the patient said they wanted to continue with their partner in the room. Interviews were audio recorded, which all patients were comfortable with, although one patient hid the recorder in his hand during the interview (Ritchie & Lewis, 2003, p. 166).

All but two recruited patients were able to provide their perspectives of the NSP. These two patients agreed to participation in the research project and signed the consent forms. However, once the interview commenced, one patient denied active drug use and participation and knowledge of the NSP. The second patient denied ever injecting drugs, although she was aware of the NSP. For both interviews I attempted to clarify the anonymity and privacy of our interview and I also attempted to discuss other topics to put them at ease. Neither patient was able to provide me perceptions on the NSP, so both interviews were excluded from the sample. I did, however, provide both patients a $20 honorarium for their time (Ritchie & Lewis, 2003, p. 163).

2.6 Data Analysis

Interview recordings were transcribed by a professional transcription service. After each transcript was returned, I listened to the recording of each interview while reading the transcript. I ensured as many words as possible were transcribed and I replaced all personal names with pseudonyms to ensure privacy of the patients and staff. During this process, I encountered several

slang words and phrases. Therefore, I created a slang dictionary to increase the flow of analysis for myself and anyone else analyzing these transcripts (Appendix 2.0).

I used the qualitative research software ATLAS.ti 8 to manage and analyze the transcripts. Data collection and analysis took place iteratively. This allowed me to analyze and establish preliminary interpretations, and then question and refine my interpretations as the interviews continued. Iterative data analysis also allowed me to add questions to my interview guide. For example, during my first interview the patient articulated a need for an SCS in the RAH. I therefore revised my interview guide and began to ask all patients their thoughts on a supervised consumption service in the RAH (Higginbottom et al., 2013, p. 6).

Focused ethnographic data collection field visits are of short duration but generate substantially rich data. Therefore, the analysis of focused ethnography data is thorough and time intensive (Knoblauch, 2005, p. 7). I used content analysis to analyze my transcripts. Content analysis is typically used to describe an experience or situation existing literature or theory is limited. It entails examining text data and classifying that text into categories that reflect similar meanings. The aim is to understand the significance and meaning of the text. Content analysis does not use preconceived categories, but instead allows the classification to flow from the text (Hsieh & Shannon, 2005, p. 1277-1279). I chose content analysis because it allowed me to capture topics discussed during my interviews in an efficient and timely manner (Hsieh & Shannon, 2005, p. 1278). Another reason for choosing this method was that content analysis has precedence within qualitative healthcare research (Elo, 2014, p. 1).

The first step I took was to read each transcript in full. During this step, I often made notes regarding my initial impressions of something the patient or I had said, or other reflections to revisit later. I then reread each transcript line by line. While doing so, I identified meaning units within the text. Meaning units can be understood as groups of words or statements that relate to the same focal

meaning. I began at the granular level and highlighted and abstracted meaning units that might be significant to my research questions. I also explored the latent content of the text. I did this by identifying meaning units at a higher level of interpretation. I then labeled these meaning units with codes. A code can be seen as a heuristic device that allows a researcher to parse a dialogue into discrete identifiable objects. I gave each code a short label and a one or two sentence description. This process continued until the entire transcript had been coded (Elo, 2014, p. 5; Erlingsson & Brysiewicz, 2017, p. 94; Hsieh & Shannon, 2005, p. 1279).

I started analysis immediately after my first interview and I completed iterative data analysis and collection throughout the entirety of the study. Early in my data collection process, I began to identify patterns in the text. I then clarified and condensed any codes that were similar or repetitive. After all 21 transcripts had been coded, my analysis contained 228 codes. I then sorted and aggregated these codes into 8 categories with 23 sub-categories of mutually shared content (Appendix 3.0). I describe these categories and their subcategories in my results chapters (Chapter 3 and Chapter 4).

I then answered by research questions by analyzing the latent themes, or the underlying meanings within and shared across the 8 categories. A theme can comprise several categories or sub-categories, and themes are not always mutually exclusive. I describe and interpret my themes and I answer my research questions in my discussion chapter (Chapter 5) (Graneheim & Lundman, 2004, p. 106-107; Miles & Huberman, 1994, p. 58).

2.7 Rigour

Rigour in qualitative research can be seen as a group of techniques used to ensure and demonstrate the high quality and soundness of the data collection, analysis, and results (Mayan, 2009, p. 100). Little agreement exists on the use of and terminology to describe these techniques, but

I chose one set of rigour criteria that have a degree of historical precedence in healthcare research (Mayan, 2009, p. 103, 104; Morse, 2015, p. 1213).

I specifically chose to use the criteria for rigour suggested by Janice Morse (2015), which involves distinct steps in establishing validity and reliability (p. 1213). Validity can be defined as the degree to which "the research represents the actual phenomenon" (Morse, 2015, p. 1213). Morse suggests six techniques a researcher may use to help establish validity. I attempted to use five of these six techniques, which included thick description of the data, creating a coding system, clarifying research bias, debriefing, and negative case analysis. I could not use the sixth technique of data triangulation given that alternative formal data collection strategies fell outside the scope of my thesis project (Morse, 2015, p. 1217).

According to Morse, prolonged engagement and observation are necessary to create thick description of the data, meaning detailed and rich descriptions of the phenomenon analyzed. However, given the setting and my research method of focused ethnography I could not spend extended periods of time engaging with participants or observing them. Morse suggests that thick data can also be accomplished through continuing with data collection until data saturation is reached and also ensuring the appropriateness of research participants by completing purposive sampling (Morse, 2015, p. 1214).

I continued interviewing until I had reached data saturation; while coding the transcripts of Patients 19, 20, and 21 I created no new codes except one code describing discrimination against transgender patients. Also, I solely interviewed patients that the ARCH team identified as eligible and who were willing to be approached by a researcher. However, as the project progressed I requested the ARCH team recommend patients with particular demographic characteristics, such as non-Indigenous patients, females, or patients who hadn't accepted supplies in order to enrich my data set (Morse, 2015, p. 1214).

Morse also suggests the researchers that utilize semi-structured interviews, such as myself, create a coding system, meaning creating a systematic method to label and organize one's codes. Taking this step helped me ensure validity by allowing me to more easily identify patterns in the data and also prepare the transcripts to be co-coded. Morse also suggests researchers clarify and account for their personal bias, which I attempted to do by maintaining a personal journal separate from my reflective journal. I wrote about my personal thoughts and feeling in this journal before and after interviews and throughout my research project. This journal encouraged my own reflexivity and awareness of my personal biases (Morse, 2015, p. 1215). I also further discuss my positionality and personal biases in section 2.8. Also, Morse suggests debriefing, which I attempted to do by periodically checking in with my supervisor regarding how the interviews were going and what topics patients were discussing. However, I did not present a detailed description of all results and in the end, I took final responsibility for the decisions I made and study results (Morse, 2015, p. 1215. Finally, Morse (2015) suggests researchers use negative case analysis to help ensure validity, which for semistructured interviews entails discussing which research questions were not answered or which interview topics were not sufficiently described in detail. I attempt to accomplish this in my discussion chapter (p. 1215).

Another step in ensuring rigour involves establishing reliability. Reliability can be seen as "the ability to obtain the same results if the study were to be repeated" (Morse, 2015, p. 1213). Steps to ensure reliability often aid in ensuring validity as well. Morse provides three strategies to help ensure reliability including, thick description, which I describe above, and establishing inter-rater reliability and utilizing member checking (Morse, 2015, p. 1213).

After I had completed my tenth interview and prior to my eleventh, I had an experienced qualitative researcher who was familiar with the RAH, the ARCH team, and our patient population code a randomly chosen 20% (n=2) of the ten transcripts I had already analyzed. This sample size

has been utilized in other studies and it was also the largest number of transcripts the co-coder could code given time constraints. However, I believe 20% was sufficient to evaluate to what degree the person and I made the same or similar coding decisions (MacPhail, Khoza, Abler, & Ranganathan, 2016, p. 203).

Little guidance exists on how to co-code without statistically analyzing the inter-rater reliability. I chose to verbally describe to my co-coder my project and my research questions and then I asked the co-coder to independently identify and abstract the latent content of the text as I did during the first step of my analysis (Blair, 2015, p. 22). We then sat together and compared our coding decisions. Although the co-coder often used slightly different terminology from mine, the underlying meanings were the same or similar for nearly all codes. Any differences in coding were discussed and resolved before I moved forward with my iterative analysis (Morse, 2015, p. 1218).

Another step I took to help ensure reliability was member checking. Member checking generally involves returning a completed analysis to a participant to guarantee the analysis and interpretations reflect their perspective. Given the setting of my research and the transient nature of my participants, this was not possible. Instead, I completed something similar to member checking during my concurrent data collection and analysis period in two different ways. One, after I had interviewed one patient and was interviewing another patient, if after asking an open-ended question the second patient didn't mention a particular aspect of a topic, I would ask, "Some patients tell me this. What do you think?". These questions were carefully asked to avoid influencing a patient's response, but instead aided in determining examples of normative behaviour. Second, I met with five Community Advisory Group members to discuss my preliminary results and elicit reflections on the reliability of my analysis. Again, all members agreed with the patients I interviewed and no new themes or suggestions to modify the NSP emerged (Morse, 2015, p. 1218).

2.8 Positionality and biases

As a researcher, I reflected on and here openly state my positionality in relation to the subject of harm reduction and also the individuals who participated in my study. I also describe the ontological and epistemological positions I used to approach and complete this research project. This is important because a researcher's inner world view and outer appearance and method of interacting with the world, and also chosen philosophical research underpinnings, affect all stages of the research process. Clearly addressing these factors will aid others in interpreting my results (Savin-Baden & Major, 2013, p. 71-73).

I am a female who grew up in a middle-class Caucasian family in the United States with few substantive or meaningful interactions with individuals with substance use disorders, who are unstably housed individuals, or of Indigenous descent. I completed my undergraduate degree in International Relations with the plan of working in the foreign service. I then spent a significant time living abroad in lower-income countries where I witnessed and collaborated with various under-privileged and stigmatized individuals and groups. I found interning at the United Nations in Kyrgyzstan particularly rewarding. As an intern, I supported harm reduction interventions aimed at unstably housed women who inject drugs. Following my travels abroad, I came to the University of Alberta, gained employment as a graduate research assistant with ICHWP, and am now completing my Master of Science degree in public health in order to gain skills to help improve the health of stigmatized populations and advance health equity.

I approached this research project with the theoretical stance of postpositivism and a critical realist ontology, meaning I recognized that a single reality does exist but its complexity impedes imperfect humans from comprehending it fully. This concept of reality allows for a quasi-objectivist epistemology, which led me to approach data collection and analysis recognizing that the patients I interviewed held multiple discernible perspectives of reality and in order for me to represent their

realities as accurately as possible I had to attempt to remain objective by utilizing techniques of rigour (Guba & Lincoln, 1994, p. 110).

During my interviews, I presented myself to patients as a research student who was not a healthcare professional. I often wore casual clothing and would bring them coffee or snacks before the interview in order to express my appreciation for their time but also as a means of reducing any tension or awkwardness. Prior to commencing each interview, I made it clear to patients that the comments they made would not be disclosed to members of the ARCH team or RAH staff. During my interviews, I attempted to ask non-leading questions, listen attentively and responsively, and remain open-minded to explore all responses by patients. During data analysis I remained close to the data and also utilized techniques of rigour to ensure I was interpreting patients' perspectives and experiences as rationally as possible.

However, several circumstances may have affected how patients viewed and interacted with me. While I was completing my interviews, I did wear a lanyard that said ARCH on it and patients often spoke to me as though I was a member of ARCH and, at times, I naturally responded as though I was. Also, because I do personally believe in harm reduction, I may have conveyed this in how I asked or responded to questions or in my body language. In addition, several patients made statements to me that clearly conveyed they had made the correct assumption that I had never experienced homelessness or a substance use disorder and I was not Indigenous. Because of these circumstances, it is possible some of the patients I interviewed may have felt more comfortable saying certain things to me or refrained from saying certain things. Although I cannot quantify to what degree this may have affected their responses to my questions, I hope the steps I have taken to incorporate rigour into my study will ensure to a significant degree the soundness of my results.

2.9 Generalizability

Patient-oriented research typically involves studies with smaller sample sizes. It emphasizes the "individualization" of results and the identification of effective interventions for subgroups of patients (Sacristan, 2013, p. 4). Focused ethnography delineates studies to specified cultures familiar to the researcher (Cruz & Higginbottom, 2013, p. 38; Knoblauch, 2005, p. 5-6, Mayan, 2009, p. 39; Richards, Morse, 2013, p. 58; Wall, 2015, p. 4-5).

Since I utilized these research techniques, the results of this study will hopefully be relevant to the RAH and perhaps acute care settings similar to the RAH. During my interviews several patients described their experiences at other hospitals in Edmonton, specifically the Grey Nuns, the University Alberta Hospital, and the Misericordia. They mentioned how those hospitals do not distribute sterile supplies to patients. These and other acute care settings in Edmonton and Alberta that are similar to the RAH may choose to use my results to decide whether to establish an NSP in their acute care facilities. However, the results of my study may not necessarily be relevant to acute care cultures vastly different from the RAH (Goodson & Vassar, 2011, p. 4; Lincoln & Guba, 2011, p. 27).

2.10 Chapter Summary

In this chapter I described all steps taken within my study. I defined patient-oriented research and explained how each step I took fit within a patient-oriented research framework. In the next two chapters I present my study results. Chapter 3 focuses on patients' personal and drug use history and their experiences with the RAH and with the ARCH team, whereas Chapter 4 discusses their experiences injecting drugs while hospitalized at the RAH and their experiences with the NSP.

Chapter 3 Results: Patients' experiences of the acute care at the RAH

In Chapters Three and Four I describe in detail the prominent categories I highlighted during my data analysis. In line with patient-oriented research, I disaggregated my results, meaning I described all salient topics, even those discussed by only a few patients. I did this because the goal within patient-oriented research is to consider ways of tailoring health interventions to reach a variety of unique patients (Canadian Institutes of Health Research, 2011, iii, p. 1-2; Sacristan, 2013, p. 4).

Specifically, I describe the topics within the eight categories and the 23 sub-categories using Morse's guidance (2015, p. 1213), which involves extracting, condensing, but contextualizing results. I accomplished this by extracting several detailed quotes for each sub-category and then describing the context and the meaning behind those quotes and provided one or two example quotes below (Morse, 2015, p. 1213).

Patient interview questions primarily revolved around my research questions, which aimed to understand how ARCH patients perceived and experienced the RAH and its staff and ARCH's acute care NSP, and how the NSP could be modified or improved. Patient responses reflected a range of views and experiences. In Chapter 3, I describe their thoughts and experiences regarding their drug use and health, as well as their experiences at the RAH and as an ARCH patient. This chapter will provide context for patient perceptions of and experiences using the NSP, which I describe in Chapter 4.

3.2 Sample characteristics

3.2.1 Demographics

According to ARCH administrative data, amongst ARCH patients that accepted supplies during my data collection period, 55% were female and 62% were Indigenous. Their mean age was

40 (range: 19 to 63). I attempted to interview patients that had similar demographic characteristics. However, the demographics of the patients I interviewed differed slightly due to patient interest and availability. I interviewed 21 patients. Ten (48%) patients identified as female, ten (48%) identified as male, and one (5%) identified as transgender. Seventeen patients (81%) identified as Indigenous and four (19%) as Caucasian. Patients were on average 46 years old (range: 30 to 60).

3.2.2 Patients' hospitalization status

All patients interviewed had been admitted for inpatient treatment at the RAH. All patients had also reported active or recent injection drug use. Some patients were hospitalized for several days to a few weeks, while others were hospitalized for several months.

All patients were under the care of RAH staff on the ward in which they had been admitted. All patients were also under the care of the ARCH team, a consult service. ARCH team addiction counsellors, social workers, and peer support workers support the patient through their hospital stay by providing a variety of inpatient counselling and supportive services and also connecting them to wrap-around community supports (see Chapter 1 for additional detail on the ARCH team model of care).

3.2.3 Drug use history and current status

Throughout the interviews, patients often described aspects of their drug use history and current drug use. Although certain patients felt more comfortable discussing these topics than others, overall patients described experiencing severe substance use disorders. While a few patients had transitioned from injection to oral drug use at the time of interview, all patients had injected drugs within the six months prior to the interview. Patients reported injecting drugs for an average length of 17 years (median: 11; range: 1 to 40).

Of the 21 patients interviewed, 14 (67%) described primarily injecting opioids, 5 (24%) described injecting both opioids and stimulants, and 2 (10%) described primarily injecting stimulants. Several patients had also had previous substance use disorders, specifically crack cocaine use disorders, but had transitioned from using crack to using methamphetamines or opioids. A few patients as well described having current or previous alcohol use disorders.

> 'Owen': Well I started [injecting] back in, basically, '70's, late '70's, early '80's…But I quit for, I quit when crack came out. So, I quit for like 27 years [and smoked crack instead]. I just started injecting again about five years ago, four, five years…When I started doing meth.

Some patients described to me how they initiated injection drug use. Certain patients began injection drug use due to curiosity or because of pressure from social acquaintances. Other patients transitioned from snorting or smoking drugs to injecting in order to make the intoxicating effects of the drugs arrive faster or last longer.

> 'Leah': I came to the [RAH], I got addicted to [injecting] opiates. That's where I got addicted to opiates. The hospital… [Another patient] told me to try it the different way…I'm like then I liked it.

> 'Andria': And it's just like I said around the time our son passed that this started…we were sniffing pills and then [my husband] is like, "You know, people are they're just doing one little pill…it's lasting them like 12 like 6 hours." And then I'm like, "What?" Cause we were doing like lines of like ten pills…and then [injecting] became sort of a norm.

However, once patients had initiated injecting drugs, they described continuing to inject primarily to manage pain, cravings, or withdrawal symptoms, although several patients did describe continuing to inject because of the pleasant effects.

> 'Linda': Some people [inject] just to get high, just to the get the crunch. I do it because I'm in pain. And I even try to school some of the younger people downtown, don't ever try morphine…you'll be a slave to it, trust me…instant pain gone as opposed to waiting 20 minutes to half an hour for your pill to kick in. Some people are addicted to that and some people are addicted to just the poke. Just to feel the needle…It's like a ritual kind of thing almost.

> 'Carl': It's instantaneous, you know what I mean?…heroin…never used to do anything for me except get me out of pain and stuff like that but where hydromorphone would have this little euphoria…this little rush, right, that I didn't get with other things. It's like, it's like

> everything has a flavor, you know what I mean? Morphine gives, like these little pins and needles sensation, this warm rush, you know what I mean?

Some patients also discussed aspects of their personal lives. Nearly all patients were struggling economically at the time of the interview. Several of these patients described relying on government income support programs, recycling or selling discarded materials, or selling drugs to access funds. Most patients were presently or previously unstably housed or homeless, and living in poverty. Patients described sleeping outside or in shelters and spending significant amounts of time outside visiting or using drugs with others in their community.

> 'Abby': Oh good Lord, you know I never went to the hospital in life until I was homeless. I can't remember, four years ago. I was homeless and yeah, that was the first time I experienced being in a hospital.

> 'Owen': I was going to write a book. I was going to call it 100 cans. Because that's what you need to pick a day to get a shot.

A few patients described how their drug use had negatively affected their partners and family members. They talked about how their substance use had led to strained relationships or estrangement from their significant others or their children. One described how a friend had used her morphine without her knowledge and overdosed and died as a result. These patients expressed degrees of regret and shame for the effects their drug use had had on others.

> 'Linda': Because my friend…didn't know I shot up right…he caught me doing a shot in my room…He goes, can I try? I'm like, no. Are you kidding me. I said no. Anyway, he ends up giving me $40 to go buy him some more crack and I put my wash, my leftover morphine, in the closet…That asshole went and took that and did it and he died from it, overdosed on it …I tried turning him over, he was already stiff in his arms…I knew, he was gone.

A few patients also described contemplating or actively attempting to reduce or cease injecting drugs. These patients primarily wanted to transition out of injection drug use to reduce or prevent further physical and emotional harm to themselves or others.

> 'Elsa': I want to stop [injecting drugs] …It's causing me too many infections. Too many sicknesses, and it's just too much, too much drama.

Despite these economic and personal struggles, a few patients described having a personal support network and actively receiving or providing support to significant members of their personal or community circles. Several patients had received emotional, physical, and financial support from family members or intimate partners. While others described congregating with and supporting other people that spent time on the streets and used drugs.

> 'Linda': I sing for [people on the streets] …And at night I walk around, see if I can find, sometimes I find people with no covers, passed out drunk right. I'll go backtrack, go get a blanket or carry a blanket with me and cover them up…I love being out there. I love singing for them. I love it.

3.2.4 Health history and current status

All patients had recently or in the past experienced physical trauma or complex medical emergencies. Patients commonly reported they had experienced accidental or violent injuries. These patients typically described having several operations and other medical procedures over a lengthy time period to manage these conditions.

> 'Candice': I think this thing's been going on for like years and years. Like, I got injured five years ago, and my doctor back then said that there was fluid leaking into my spine.

A few patients also reported experiencing emotional trauma or mental health disorders. These patients did not claim their drug use was due to these emotionally traumatic experiences; however, these experiences did appear to continue to be affecting their emotional wellbeing. When describing these experiences, most patients cried or showed other signs of emotional distress.

> 'Curtis': I've struggled with depression for quite some time and just you know there's not a day that doesn't go by that I don't think about leaving this planet…you know, for as long as I can remember I've had, I don't know, well before I started doing dope, I've had voices.

Nearly all patients reported experiencing chronic or acute pain disorders. The pain they described experience was nearly always connected to a severe injury they had experienced in the past. Several of these patients used opioids to manage their pain levels.

'Carl': I've been in chronic pain about my back for five, six years now because of an accident that I had when I was on a job site.

'Candice': First it started with the carpal tunnel, I got the surgery…that's when they started giving me Tylenol 3…the addiction started progressively worse and then it got worse over the years right.
Interviewer: So would you say your use of opioids and your chronic pain are kind of interconnected?
'Candice': Well obviously, yeah…I wouldn't even have known what an opiate was if a doctor didn't prescribe it to me in the beginning, right?

Patients also described experiencing acute physical harms or drug overdoses from injection drug use. These physical harms included trauma or infections from unintentional subcutaneous or intramuscular injections, or infections from using non-sterile injection supplies. Several patients had also experienced accidental opioid drug overdoses. Fourteen of the patients interviewed were hospitalized at the RAH due to infections related to unsafe injection practices.

'Owen': I used to pay when I do it before, all the time…I've had people say they knew how and then didn't, and actually, this one woman even turned her head and stuck the needle in me and pulled in and shoved it in. It looked like someone blew bubble gum under my arms. And the pain was just unreal.

'Oliver': I thought it was heroin, and it was fentanyl. Just a crumb of that stuff…he narcan'ed me twice and called 911.

As a result, most patients interviewed had had numerous interactions with the primary and tertiary healthcare systems.

3.3 Patients' positive experiences with RAH staff

3.3.1 Positive impressions of the RAH

I asked patients to give their overall impressions of the RAH. Some patients held favourable views of the RAH. These patients thought the RAH was in a convenient location and provided high quality care to patients. Others viewed the RAH as a large and busy hospital that had shortcomings but was able to provide adequate care for patients.

Interviewer: What do you think about the [RAH]?

> 'Kenneth': I think it's okay. I think it's a good hospital, I think the level of care is satisfactory we'll say. It does get a really bad rap…Because it's a, but I think a lot of that has to do with, it's an inner city hospital, so they got a lot of…more inner city problems.

3.3.2 RAH staff are non-judgmental and provide a positive level of care

After gauging participants' overall impressions of the RAH, I asked them to provide detailed examples of their experiences with RAH staff. Some patients felt RAH staff didn't judge them for their drug use. These patients described at least some of the staff as interacting with them in a polite and professional manner and providing the same level of care as they would other patients who did not use drugs.

> 'Candice': [The staff] have been awesome here for me, they're really good…I feel like a person, not like an addict. You know…they treat me good here…Certain people. I mean like not everybody, you know what I mean?

> 'Curtis': [The care here] has been alright, I mean they're a little swamped as you can see, it's you know, but all in all their mannerisms are, you know, they didn't treat me any different being that I'm homeless and you know they're very polite.

3.3.3 Patients feel comfortable communicating with RAH staff

Other patients described feeling comfortable asking for items such as food or a blanket or assistance with accomplishing certain tasks, or requesting supplementary medication or information regarding their care plan. These patients described staff responding to their requests or questions in a polite and helpful manner.

> 'Andria': Well that one nurse that was kind of snotty at first…and then I said, "Well, if you could, could you bring a juice?" She's like, "Well, I don't I think we're pretty limited right now…And when I woke up, there was a juice sitting there. I was like nice thank you…So I made a friend…Yeah, that was cool. The little things, eh? Juice.

Some patients also felt comfortable discussing their drug use with RAH staff. These patients described certain RAH staff as interacting with them in a non-judgmental manner. 'Curtis' described an experience where he admitted to his nurse that he had recently used drugs.

> 'Curtis': When I had come back in, you can pretty much, they know, you can just tell they know [I had been using drugs]. Mind you their demeanor didn't change towards me…when they pulled [my IV] out the needle was bent right… [the nurse] looked at me and she's like, oh my God, how, wasn't that uncomfortable?…I kind of just pretty much told her…I got a little carried away working on my bike…I was a little high, I'm sorry. She's well no need to be sorry, just you know…you're the one in discomfort.

'Candice' also reported her recent drug use to RAH staff, and said that one staff member discussed safer drug use practices directly with her. According to 'Candice', the nurse warned her about the dangers of injecting into vascular access devices and also warned about what would happen if she chose to ignore this warning. 'Candice' appeared to appreciate the nurse's honesty and interpreted the warning as concern.

> 'Candice': The IV team…told me if I use my PICC line to get high they will shoot antibiotics into my, muscular injection, the whole time I'm here…shit yeah, I didn't touch that PICC line.
> Interviewer: And when they told you that, how did they talk to you about it?
> 'Candice': Oh it was really concern. It was more concern than anything.

'Abby' told me she felt comfortable discussing her drug use with RAH staff. At one point she asked a nurse what would happen if RAH staff caught her injecting drugs in her room. According to 'Abby', the nurse responded respectfully and with an open mind regarding patients using drugs in their rooms.

> 'Abby': I said [to my nurse], "Let's say one of these days I'm making my medicine for my rig, somebody comes in and catches me, what would you do?" And she goes "Well, that [ARCH] lady that was here, she's not there for nothing"…In essence she was telling me that, do whatever it is you have to do and do it as [ARCH] said, don't be, be discreet, don't hide, above all don't hide in the corner or whatever. If you're doing it, just put it down if somebody comes in.

3.4 Patients' negative experiences with RAH staff

3.4.1 Negative impressions of the RAH

However, other patients described having negative impressions of the RAH and the care provided by its staff. Several of these patients described the RAH as having a bad reputation in the community and having been given the moniker 'butcher shop'.

> Interviewer: What's the reputation that the Royal Alex has amongst you and your friends? 'Allison': They call, a few of my friends call it a butcher shop…Come in, lose a limb and they kick you out. It's bad. Things I hear about it.

3.4.2 Patients felt the RAH staff judged them

Other patients I spoke to described certain RAH staff judging them for their drug use or appearance. Specifically, these patients felt ED staff immediately dismissed their descriptions of pain or injuries as illegitimate, or assumed they had presented to the hospital to access drugs for illegal use. Patients also felt ED staff judged them due to their street-involved appearance, history of drug use, or Indigenous race. Once hospitalized as an inpatient on the hospital wards, other patients felt some RAH staff disregarded their requests for their pain medication to be dispensed at a particular time or failed to accept their descriptions of symptoms.

> 'Curtis': I had dislocated my shoulder and, yeah it was just as soon as I said that [to the ED staff], you know, as soon as I said once again that I was homeless they treated me actually quite, quite awful down there…I think they thought I was here grinding for dope…Their whole demeanor changed the minute they found out I was homeless and was a drug addict. They went from being nice and polite to right rude…In which case, I got up and walked out and yeah popped my shoulder back in place myself, so.

> 'Candice': It's just you know they think that's the only reason why I came in is because I wanted painkillers or something. That's not it at all. I want to live, I have an infection in my back.

3.4.3 Patients felt RAH staff could be rude

I then asked patients to describe in greater detail the actions RAH staff took that they interpreted as negative. The actions patients described ranged from subtle ways staff interacted with them to direct face-to-face negative incidences.

Some patients felt that RAH staff observed their actions or inspected their body for signs of drug use or scrutinized their belongings more than patients who did not use drugs. These patients described feeling anxious, "on pins and needles" or "walking around on eggshells" when this occurred.

> 'Thomas': It's like you're sneaking, you know, kind of peeking at me, you know, seeing if I'm doing something I shouldn't be doing like maybe getting a fix ready or something like that you know?…I do notice a lot of times they'll check if I have my t-shirt on…just examining my arms or whatever like.

'Justin' felt judged for his drug use and felt staff interacted with in subtle ways that he interpreted as negative. According to him, no matter what actions he took, little could be done to alter the actions of these RAH staff members.

> Interviewer: Has anyone treated you differently once they find out that you have [an addiction?]
> 'Justin': Not outright, but you can feel it in the air that they have…their own formed opinions and that's the way they see it and that's that. There's no changing their mind…They kind of put you behind everybody else, they would do something for a person who doesn't have a known drug addiction as to where if they knew about your drug addiction they would leave you last…for any kind of a service of whatever.

Several patients described overhearing RAH staff talking about them behind their back in what they felt was a rude and unprofessional manner. These patients described overhearing staff complain about the amount of help they requested or laugh at or mock their current health and drug-use situation. Other patients even felt staff talked about them to each other and chose to gang up on them and as a group treat them in a negative manner.

> 'Thomas': I can hear [the nurses] talking…it's right at the nursing area there. I can hear them talking about me, you know…I don't know what for, you know, I haven't said or done anything for them to be talking like that about me, you know, that was really hurtful.
> Interviewer: Is it okay if I ask what they were saying?
> 'Thomas': I don't know, I guess they were implying that I was asking for too much help or whatever, you know, to me that's why they're here like to help…if they didn't want to do it, they could've gave me the stuff I could've done it myself. Like to change my dressing.

Several patients also felt RAH staff were directly rude in how they spoke to them or provided care. Examples of these negative interactions included staff complaining about patients' active or previous drug use to patients' faces, or providing medical care and other services in an unkind or disrespectful manner.

> 'Abby': If [the nurses] were to come in to tend to my needs or vitals or whatever, they wouldn't look at me. They'd turn their back on me…there was one time this one lady was

preparing something. She had her back to me, she goes you people don't even belong on this planet.
Interviewer: You people, what did she mean by that?
'Abby': Transgender probably, gay, all that under the labels.

3.4.4 Patients struggled to communicate with RAH staff

Many patients described feeling unsatisfied with how RAH staff communicated with them. These patients felt RAH staff did not discuss changes regarding their care plans. Specifically, patients described experiencing sudden and unexpected room, medication or treatment changes, or they weren't clearly told when they would be discharged. However, patients primarily described disliking changes to the type of drug prescribed to them, and when and in what manner that drug was dispensed. This lack of clarity appeared to foster significant anxiety and frustration among these patients.

'Andria': It's not fair to me, it's not fair to them, you know, and then the like I said, it's the not knowing, the not understanding and not bringing to that, you know, if they actually if the nurses communicated to the patient what the doctors ordered at what time and when, then I think that would go a long way.
Interviewer: Do you feel comfortable asking them?
'Andria': To be honest, not really…Some nurses, yeah. Some nurses. No.
Interviewer: What do some of the nurses do like when you ask stuff like that?
'Andria': You just feel like you're putting them out.

Several patients described feeling unable to communicate regarding their drug use or pain or withdrawal symptoms with RAH staff. These patients described feeling uncomfortable due to a lack of trust or fear of negative repercussions. These negative repercussions included staff prematurely discharging them or enacting changes to their medication regimes, including checking their cheeks for meds or crushing their medications in apple sauce.

'Justin': I don't feel comfortable [talking to staff] at all…Because I see them more or less as a person who would get me into trouble if they knew about my drug addiction…Probably get kicked out.

'Rhonda': I'm always in pain. Just steady constant pain.
Interviewer: And if the pain is really bad do you feel comfortable asking the doctors or nurses for more medication?
'Rhonda': I don't really ask…you get whatever you're prescribed, I guess you call it.

Other patients felt RAH staff were not specialized in addiction medicine and as a result talked to them in a demeaning manner or didn't talk to them at all, or were unable to understand the reality or complexity of their situation. As a result, these patients indicated a preference for communicating with the ARCH team.

> Interviewer: How comfortable do you feel talking about drug use to the other doctors and nurses?
> 'Penny': Oh no, no…No, I don't say nothing, no…Because ARCH, I don't know, ARCH, I'd rather talk to ARCH…I don't even say nothing to these. No.
> Interviewer: Are you, what are you afraid of?
> 'Penny': I don't know, I just got a bad feeling about it. Yeah… Some of the doctors and nurses and that…they come through…just kind of look at you and they will take off…they hardly talk to me anyways. Yeah. I don't get a chance to hardly talk to them.

Some patients even described feeling uncomfortable interacting with RAH staff altogether. This inability to communicate with RAH staff appeared to negatively affect patients' hospital stay. Several patients described rather acrimonious interactions with staff, which caused them significant stress, and felt unable to constructively resolve the conflicts. However, patients appeared to be primarily affected because they were unable to request and receive the care and pain or withdrawal symptom relief they desired or required. As a result, patients described experiencing unrelieved pain or withdrawal symptoms, or supplementing with diverted or purchased drugs to manage the symptoms.

> 'Allison': Before I seen the ARCH team, I was in here because I had an abscess on my arm I remember and so [the doctor] was prescribing me dilaudid ones…She came to me one evening and she said, she's like, are those dilaudid ones helping your withdrawal because we wouldn't want you to sneak out and go get yourself something extra on the side. [But] I was lying to her. I said they were helping when really I was just sneaking out and getting myself a couple hydro 24s on the side…Intravenous…it is hard who you put your trust in. Definitely.

Several patients described contemplating or indeed leaving the RAH before their medical treatment was complete. Motivations to leave included perceived maltreatment from RAH staff or due to unmet levels of pain, cravings, or withdrawal symptoms. Patients left against medical advice

to escape the RAH and access their desired type and amount of pain medication, or as a means of getting attention from unit staff and emphasizing the severity of their symptoms.

> Interviewer: Why do you think patients leave so early sometimes?
> 'Linda': Not enough drugs given to them. To them the pain meds, they don't want to be honest or they didn't tell the doctor what they're, how much they really do.

> Interviewer: What do you have to do to get the doctors and nurses to listen to you or believe you [about your pain]?
> 'Carl': I had to leave the hospital and, you know, leave for a day or two and come back and you know what I mean, pull a, some drama right? I packed up my stuff and left…I went to two other hospitals that would not take me because I have been [admitted here at the RAH]…I came back down here [to the RAH] and had to, yes ma'am, no ma'am, sorry, I was wrong, you were right and all this assy kissy kissy shit and got readmitted and shit…I've had to resort to…[getting] mouthy…a couple of times. And can you blame a person when they're in pain, you know what I mean?

3.5 Patients' experiences with the ARCH team

3.5.1 Positive impressions of the care provided by the ARCH team

I also asked patients to describe their experiences with the ARCH team. Several patients described how they appreciated the ARCH team's approach to care. These patients felt ARCH team members and the care they provided had positively impacted their physical health and emotional wellbeing. Patients described specifically appreciating how the ARCH team came to see them individually and attempted to get to know them and build a rapport or a relationship with them.

> 'Candice': [ARCH] don't forget about what I told them in the past and stuff you know what I mean…And the one doctor…she's like, well don't you remember what you said to me two years ago?…it was like yeah, I remember that. Like I probably wouldn't even have started the methadone this time around if [ARCH] hadn't have been coming around and giving me those heads up and you know, making me realize that it was just, there's much more to live for you know…I almost feel like sometimes the ARCH program is helping me live you know. Like they're really giving me a second chance at life…I don't even know what I heard the ARCH program through, but all I know is if I never heard of, I probably wouldn't even be alive today.

Others described appreciating how the ARCH team respected them as autonomous human beings and attempted to elicit their thoughts and preferences regarding their care plan. These

patients were surprised but grateful that the ARCH team attempted to collaborate with them and provide them options regarding their medication regimes and other aspects of their hospital stay.

> Interviewer: What do you think about the ARCH doctors and nurses?
> 'Justin': They treat you like a human being…They're pretty good, they're understanding. They give you more than one option as to how to go about some things, whereas, other nurses and doctors would just say this is what you got to do, this is what you don't do and that's it. But with the ARCH team you get more than just one option as to how to go about things.

Several patients mentioned how they felt more comfortable relying on ARCH staff to help them solve issues, resolve conflicts, or to be a listening ear when they had negative experiences with other hospital staff.

> Interviewer: How comfortable do you feel talking to the nurses and doctors here about drug use and stuff like that?
> 'Ruth': I feel more comfortable now since ARCH program has been put in place here…If I have a problem, I know I can get the ARCH people on top of it. They treat me differently or whatnot, I know I can tell any of the doctors or any of the people from ARCH what's going on and they'll get on top of it…[ARCH] can help with voicing out and making sure nobody's discriminating or treating other patients differently, or whatnot. I don't really care if they know that I'm an addict. I'm still a human being. I'm still a patient. I deserve to be treated accordingly…Some of these people have gone to school for so long, well I went to university for five and a half years so I've gone to university just as long as they have. I'm not undereducated. I'm not stupid.

Other patients described being able to trust the ARCH team and feeling more comfortable talking to them about their drug use because the ARCH team interacted with them respectfully and with an open mind.

> Interviewer: Do you talk about using the [NSP] with your other doctors and nurses here?
> 'Leah': Ah, yeah. Well maybe I'm kind of lying, a little white lie, maybe that I don't tell them that I use. I do tell them when I do have a slip though. I tell the ARCH doctor for sure. Maybe not sometimes the [non-ARCH] doctor.
> Interviewer: The other doctors?
> 'Leah': Because, yeah, they don't, it doesn't seem like they get it like the ARCH does. They're more compassion and more understanding and more down to earth. They get it right. But these guys don't.

3.5.2 Judgment due to participation in the ARCH program

However, not all patients felt their participation in ARCH was completely positive. Two patients specifically mentioned that they felt their participation with ARCH led to certain RAH staff judging them. According to them, if unit staff know you're an ARCH patient it automatically labels you as someone with an addiction and therefore leads to staff interacting with you differently or staff providing care or dispensing medication differently from patients who do not use drugs.

> 'Ruth': When other nurses or other staff people know that you're part of the ARCH program. So then they already know you're a drug user…It causes stigma right away. That they, oh, they're a drug user. I think the attitude they have toward you is sort of dwindles, they sort of treat you a little different, especially when it comes to your pain meds…Because of the ARCH doctors coming to see you and they're in charge of your pain meds and whatnot, then you know there's already a stigma right there, they're drug users. Because they're part of the ARCH team, part of the ARCH program.

3.6 Patients' perceptions and experiences with medication regimes

3.6.1 RAH staff, the ARCH team, and patients' medication regimes

Several patients had detailed opinions regarding their medication regimes. In particular, these patients described challenges with the amount and type of medications they were prescribed and how their medications were dispensed.

Responsibility over a patient's medication regime is shared between RAH staff and the ARCH team in the following way. When a patient is first seen by the ARCH team, an ARCH physician or nurse practitioner asks that patient about their typical drug use patterns and their drug use and health goals. That ARCH team member then attempts to make collaborative decisions with the patient regarding the type and amount of medication that will be prescribed to them while they are hospitalized. That ARCH team member may also offer sterile injection supplies and discuss safer drug use practices if the patient continues to inject while hospitalized. The ARCH member then provides medication and care regime suggestions to the RAH physician in charge of the patient. This RAH physician is considered the most responsible physician for the patient and thus makes the final

decision regarding that patient's medication and care regimes, although RAH physicians typically heed the suggestions of the ARCH team. After a regime has been established, ARCH physicians and ARCH nurse practitioners frequently check in with patients, although RAH unit nurses dispense all medications and provide daily care to that patient.

3.6.2 Pain and withdrawal management

Of the 21 patients I interviewed, ten felt their pain was generally kept under control, three felt their pain was moderately kept under control, six felt their pain was not kept under control, and two did not experience pain. A majority of patients did not mention experiencing withdrawal symptoms, although four patients specifically stated they had experienced symptoms.

3.6.3 Patients' positive experiences with decision making regarding their medication regimes

Many patients described appreciating how the ARCH team asked and accepted their descriptions of pain and withdrawal symptoms without preconceived judgment. Patients also appreciated how the ARCH team prescribed a higher level of medication than what is typically prescribed to attempt to match their drug tolerance levels. Patients were also given a degree of choice regarding which medications and treatments to choose and when to commence them, which was typically a surprise to patients but greatly appreciated.

> 'Carl': [ARCH has] helped me out, like a lot in getting my medicine…and pain control [the doctors] made it relatively painless. They weren't like, you know, overly easy about getting …opiates and stuff…but they took me seriously in what I said and what I was experiencing and everything and, you know, my tolerance for it and my history and everything and took it as fact without being suspicious and automatically assuming that I'm a liar and trying to, you know, get high or some fucking thing, which is usually the case. But it wasn't and thank god for that because I was in a really bad spot so [ARCH] are, yeah, it was very, very cool.

3.6.4 Patients' negative experiences with decision-making regarding their medication regimes

Other patients, however, described feeling unsatisfied with their medication regimes. Some of these patients felt their pain or withdrawal symptoms were not adequately managed and that the amount of medication that the ARCH team had recommended they be prescribed was not sufficient. As a result, these patients described experiencing under or unmanaged pain or withdrawal symptoms.

Some patients experiencing pain or withdrawal symptoms asked RAH staff for supplementary medication. However, typically these patients felt that when they asked for supplementary medication their requests were ignored or dismissed or they feared negative repercussions from staff. As a result, several patients had given up and decided not to ask for changes to their medication regimes.

> 'Kenneth': When it comes to asking questions about my healthcare plan or my medications or whatever and I just feel like things are being minimized and I'm kind of, they kind of just shrug it up to that's not really important now or we'll talk about it later, is kind of the impression that I get.

> Interviewer: And have you experienced any withdrawal symptoms while you've been here?
> 'Justin': Yeah, yeah. But again, that's up to you how you would want to handle that. You could just go out and score something and come back or just tough it out.
> Interviewer: Do you feel comfortable talking to the nurses and doctors about withdrawal symptoms?
> 'Justin': No…Because it always seems to come back to the same thing like there's this patient, and just might have took this drug…I think it limits you as to your the availability and the access they were going to give you to a drug knowing that you do abuse it…It is, like because you always go to be thinking, "Well if I tell them this, what did I tell them last time, is it going to make sense to them? I am going to get an increase, a decrease or are they going to just stop giving it to me all together?".

3.6.5 Patients' experiences with decision-making regarding opioid agonist treatment

Several patients also had significant opinions on opioid agonist treatment, or specifically methadone and suboxone. Although the ARCH team practices harm reduction and does not

prohibit patients from actively using drugs while hospitalized, it is the goal of the ARCH team to ultimately help stabilize patients' substance use, which for many patients would entail opioid agonist treatment initiation.

Several patients who had been recommended opioid agonist treatment by the ARCH team had had positive experiences in the past or looked forward to commencing methadone treatment. These patients described significant periods of time in the past where they did not use or inject drugs because they were on opioid agonist therapy. While others described commencing opioid agonist therapy during their current hospital stay in part because of the support and encouragement provided by the ARCH team. While these patients had experienced the positive effects of opioid agonist therapy, most patients held strong reservations and were hesitant to commence treatment. Patients described disliking the side effects, fearing becoming dependent on another substance, or fearing they would have to reduce the amount of pain medication they take and as a result they would experience increased pain. This was described by one participant below.

> 'Allison': Yeah, I was actually just thinking of it here, I was thinking…it wouldn't be so bad to eat the beads…it's not going to kill you, at the same time it's going to get you unsick and for free. And methadone wouldn't be so bad. Suboxone wouldn't be so bad. They're helping you…Every time [ARCH] asks me about suboxone or, I say no, no, no. But now I'm really thinking hard and long about rehab. It's a big step. [But], methadone I think I'm scared that I'll be stuck on it for a long time and too dependent on it…I don't want to be dependent on methadone because I'm already dependent on drug right, so just doesn't make sense.

A few patients described feeling pressure from the ARCH team to reduce the number of opioids they took orally or injected and instead commence opioid agonist therapy. The primary reason patients interpreted the actions of the ARCH team as pressure was because they feared experiencing increased pain.

> 'Oliver': [ARCH] wants me to start methadone and stop taking painkillers. I can't do that. Sure, now I'm a drug addict addicted to pain killers but fuck I'm in dying fucking pain…And now I'm using them because of my, addicted to them, you know. So, it makes it really hard to make these decisions that they want to push towards methadone and trying to get me cut off the painkillers. Sure, after I get this back surgery, I'll be down for that.

3.6.6 Patients' experiences with how hospital staff prepare their medication to be dispensed

Although ARCH team members were involved in recommending particular medications and the amounts to be prescribed to patients, RAH unit nurses dispensed all medication. Nearly all the patients I interviewed exhibited extreme preoccupation and concern regarding how often their medications were dispensed and when their medications were dispensed late. Patients typically knew exactly when their medication was to be dispensed and if their medication was late, they described a challenging and uncomfortable process attempting to access that medication. Patients described verbally calling or using their buzzer to notify the nurse, at times repeatedly and in a frustrated manner. Patients described the nurses ignoring the buzzers, turning the buzzer off, or responding with physical or verbal cues that expressed frustration. These patients described several tense interactions with nurses regarding the timing of when their medications were dispensed.

> 'Carl': I don't know if [nurses] understand but every three hours when you're in vicious pain, okay, and you get medication every three hours…you're watching that clock…I had a conversation with each nurse…please don't be late…But when a half an hour rolls by after I push that button…and you don't respond…and 45 minutes, an hour goes, I'm pissed off now. I'm in a lot of pain and I'm pissed off.

When I asked patients why they felt staff dispensed their medications late, they typically felt staff did so out of indifference regarding their levels of pain, lack of awareness of how PWID experience pain, or dislike for PWID. At times these patients described RAH staff stating or taking actions that portrayed that they felt hospitalized PWID were responsible for their health situation.

> 'Thomas': You know, I feel really uncomfortable whenever it's time for me to take my…a lot of times, I won't even both asking for my medication. Like yesterday I asked once and nothing. I never got nothing at all until the last night, I was really, really in a lot of pain.

3.6.7 Patients' experiences with how RAH staff dispense their medication

Patients not only described disliking when RAH staff dispensed their medication late, but several patients also described feeling uncomfortable or disliking how RAH staff dispensed their

medication. These patients felt RAH staff dispensed their medication in an unprofessional or rude manner. These negative experiences occurred after patients had used their buzzer to call the nurses or at times when they hadn't. Also, some of these interactions occurred when patients were sleeping or were busy and requested the nurse wait a moment. When these situations arose, patients described nurses at times reacting negatively and entering into arguments with patients after which security guards were called and patients lost access to their medication at that specific time.

> 'Carl': And like, one nurse came along and I was in so much pain and I couldn't move and she came over with my pills and my drink of water and she put it out of reach so I couldn't reach it on purpose. And I said could you please pass it closer? And she said, oh, I'm sure you'll find a way to get up and crawl across the drawer for your drugs.

Several patients also reported that RAH staff checked their cheeks for hidden pills or crushed their medication in applesauce in order to prevent them from diverting their medication. While it is standard procedure for nurses to ensure a patient has swallowed their medication by watching them swallow their pills and, if necessary, checking their cheeks, according to the ARCH team, it is not standard procedure to crush medication into applesauce.

Many patients described feeling frustrated or angry when this occurred. Some patients interpreted these actions taken as a sign RAH staff did not trust them or suspected they were diverting their medication. A few patients were in fact diverting their medication to be injected at a later time. If nurses checked their cheeks or crushed their medication into applesauce, these patients would be forced to experience cravings or increased levels of pain or withdrawal symptoms or would be forced to purchase drugs on the side.

> Interviewer: How'd that make you feel [when the nurses checked your cheeks]?
> 'Ruth': Like I was ridiculed. Like I was a child. Like you know, like I was some kind of drug addict and I was not to be trusted. Like open your mouth again. I had another nurse come, like, it was so unnecessary boy. It was really unnecessary.

> 'Dean': This hospital caught, they found a cooker so they made me, what was it, oh yeah they made me do my meds in applesauce…So, I was buying meds while I was in the hospital.

3.7 Indigenous patients' experiences

3.7.1 Some Indigenous patients felt RAH staff judged them and treated them poorly

Seventeen of the 21 patients I interviewed identified as Indigenous. At various points throughout the interview, seven of these 17 patients attributed the negative treatment they experienced from hospital staff as discriminatory and racist. These patients felt staff have preconceived stereotypes of Indigenous people and why they presented to the ED or how they would act while hospitalized. Indigenous patients described staff fearing them or interacting with them differently when compared to non-Indigenous patients.

> 'Thomas': [I'm] already judged like, you know, before the person who's making the whatever…comments or judgments towards you they don't even know you at all like…you're already judged like you know, as being…that guy, he's Native. He must get drunk and be a drug user, you know?

> 'Dean': 'Cause I get that feeling when I walk around this hospital and I walk into some staff or whatever, nurses or whatever staff they look at me and they look I'm gonna fucking shoot 'em or something, stab 'em or rape 'em or do something to them, you know.

One patient even described other patients treating her differently because of her ethnicity.

> Interviewer: How do other patients treat you?
> 'Penny': Oh boy, not too great…Ah, go to the bathroom and they have had me watch, stalling up the bathroom and all that.
> Interviewer: Do you think they're judging you because?
> 'Penny': I'm Native.

3.7.2 Some Indigenous patients had challenges with their medication regimes

Some Indigenous patients felt their challenges with their medication regimes were to an extent due to their race or ethnicity. These patients felt RAH staff dismissed their descriptions of pain or judged their descriptions of pain as attempts to access drugs for illicit purposes. Other patients felt that how nurses dispensed their medication was due in part to their race or ethnicity.

> Interviewer: Can you give me an example of racism you've experienced before?
> 'Ruth': Not giving me proper medication because they thought that I was trying abuse the medication. When really, I needed it for the type of injury that I had.

> Interviewer: And so what do you think made her think you were cheeking your meds?
> 'Dean': I don't think she, I think she probably misjudged me. She probably just doesn't, like I said man. A lot of people don't like Natives. Got to be Native to know I guess.

3.7.3 Indigenous patients' experiences with security guards or police officers

Some Indigenous patients felt that certain RAH staff punished them more severely for equal types of infractions when compared to non-Indigenous patients. These patients also felt that RAH staff called security guards on them or their family members or friends more often and that security guards discharged them or removed them from RAH property more often than other non-Indigenous patients.

> 'Silvia': You're supposed to be saving lives, you're supposed to be taking care of people's lives, keeping them alive for as long as possible. Not kicking them away, sending them out into the streets on the coldest night of the whatever. You know, give 'em a chance to warm up. Give them a chance to you know. Oh, but if it's a Native get off the property and call security.

> 'Dean': My wife was sleeping with me on my bed four nights ago…and a nurse walked in…She come in and she looks at my wife and she says you're banned from the hospital…So I said you might has well kick me out too, she said I'd love to kick you out…I'll discharge you today if you don't watch how you talk…Said they needed it for people that are ill.
> Interviewer: So, why do you think she treated you that way?
> 'Dean': Probably the colour of my skin…Or my nationality.

3.8 Chapter conclusion

In this chapter I described in detail the prominent categories I highlighted during my data analysis. Using a patient-oriented research approach, I even described topics that were discussed by only a few patients. I did this in order to consider ways of tailoring health interventions even for smaller groups of patients (Canadian Institutes of Health Research, 2011, iii, 1-2; Sacristan, 2013, 4).

I described patients' personal backgrounds and drug-use histories. I also described their experiences at the RAH and interacting and receiving care from RAH staff and the ARCH team. I also described how the care received and treatment from RAH staff was perceived to be different

based on the patient's race or ethnicity. This chapter will provide context for patient perceptions of and experiences using the NSP, which I describe in Chapter 4.

Chapter 4 Patients' experiences of injection drug use in hospital and the needle and syringe program

In Chapter 3, I provided context by describing patients' thoughts and experiences regarding their drug use and their experiences at the RAH and as an ARCH patient. In Chapter 4, I describe patients' experiences injecting while hospitalized and their perceptions of and experiences using the NSP.

4.2 Patients' experiences injecting while hospitalized at the RAH

4.2.1 Motivations to inject

Seventeen patients reported injecting during their hospital stay. Patients' motivations for injecting varied. Some patients described injecting for one primary reason, while other patients mentioned multiple reasons or that their motivation for injecting changed throughout their stay. However, patients' motivations can be divided into two broad categories: patients that injected primarily to managed their pain symptoms and patients that injected due to habit or cravings or other reasons.

Eight patients stated or implied they primarily injected to control pain and withdrawal symptoms. Some of these patients felt they hadn't been prescribed enough medication and had to inject on a regular basis to manage or prevent symptoms from developing. A few patients injected at the beginning of their stay but managed to slow down or cease injecting later once they were seen by ARCH and their symptoms were better controlled. Other patients injected when their medications were dispensed late because of a spike in pain or withdrawal symptoms. For these patients, injecting was a means to making their hospital stay more tolerable and allowing them to stay until their treatment was complete.

> Interviewer: And in order to get your pain under control have you had to supplement?
> 'Andria': Yes…Unfortunately, but you know it is what it is otherwise I wouldn't be able to lay here…Like the anxiety would be too much and the sweats…if I didn't have [my drugs] I

> wouldn't be able to be sitting here getting my medication like I wouldn't be so it's the hard truth and it sucks but it is the truth.

Nine patients stated or implied they or other patients primarily injected due cravings, out of habit, boredom, or because they enjoyed how injecting made them feel. For the patients that injected to manage their pain symptoms, most viewed injecting as a necessity, not a choice. However, other patients described injecting as part of their lifestyle, or to make their stay more comfortable, or simply because they wanted to.

> Interviewer: Why did you [inject while hospitalized]?
> 'Leah': I was an addict…[ARCH] gave me as much [drugs] as they could but then at the same time they give you what you need…It wasn't ARCH at all…ARCH was only there to help…It's my own fault because I didn't need more but my mind, you know, addict more…when you're an addict it's different. You know. You're an addict…It's not so much a craving, it's an addict, it's what we do. It's not, nothing like, not really against the hospital or anything, it's an addict, it's what we do. It's kind of our lifestyle, you know.

> Interviewer: If you go to a hospital, normally they don't want you to use while you're in the hospital, right?
> Silvia: Yeah, they don't. That's to my understanding they don't want anybody to use in the hospital. But because I got a high tolerance they ain't going to stop me…There's bathrooms, there's a lot of them.

4.2.2 Where patients injected

These seventeen patients stated they typically injected in their patient washrooms or public washrooms located in other parts of the hospital. Patients who struggled with mobility said they injected in their beds. Others reported leaving the hospital to inject in nearby alleys, behind trees or bushes, in parking garages or transit stops, or travelling to the washrooms of neighbouring commercial establishments. Patients that left the hospital inject described doing so because they felt more comfortable injecting in their usual location or because they were afraid RAH staff would catch them injecting in their rooms and punish them.

> 'Penny': In the bathroom…sometimes on the ground, if they have their own room they shut the door. Put something against it or something like that. Hear them coming.

> 'Thomas': They'll just go somewhere out in the back even behind some tree or whatever where nobody will see them and they'll just do it real fast…I'm not going to lie to you, I do

> do it like, but I won't do it here. I'll go out there and go on the other side of the road, you know, someplace where nobody will see me.

4.2.3 With whom patients injected

Patients reported primarily injecting alone. However, a few patients reported injecting with friends that came to the hospital or they met with their friends outside the hospital or the went to their drug dealer's apartment. Other patients described injecting with their intimate partners or other patients. One patient described always injecting with her intimate partner as he depended on her to inject him. Another patient described being dependent on her intimate partner to inject her; in 16 years of regular injection use she had never once injected herself.

> 'Allison': Washrooms. Private washrooms. Holds more people. That's what me and my boyfriend were doing. We'd inject together. Go to a private washroom in the hospital.

4.2.4 Where patients disposed of used syringes

Most patients described disposing their syringes in the hospital's sharps containers or placing their syringes in the sharps container provided by ARCH and storing them in their personal belongings. A majority of patients said they would not use a non-sterile syringe while hospitalized. However, a few patients did say they kept a few supplies to be used at a later time in case they lost access to sterile supplies in the future. A few patients described seeing other patients take used supplies from sharps containers for personal use. These patients felt responsible for disposing their supplies in a way so no other patient could use them. One patient described breaking the needle off all his syringes and the other flushed his used syringes down the hospital toilet.

> 'Curtis': I try to never use the same needle twice but have and I can't just I can't just throw them out and I can't just throw them in a garbage, so I like to use the proper disposal of them…but at the same time I've seen people do some gross things and dig in [the hospital sharps containers], and I don't understand it and get needles from there.

4.2.5 Access to drugs to inject

A few patients purchased drugs from their usual dealer and little changed about the type, amount, or frequency of drug they injected. These patients either left to access the drugs or had their dealer or other friends come and meet them to deliver their drugs.

> 'Owen': The guy I deal with, he doesn't go anywhere, he never leaves his house…So, I have to always go there. So, I had a hard time going there like this, because bus can only take me so far and I have to walk. [So] I'd have to get one of my friends to try and bring it.

Other patients changed their method of accessing drugs and instead purchased drugs from within the hospital grounds, most commonly in the smoking area or where other patients congregate. These patients described a market where it was relatively easy to purchase, trade, or sell prescribed medications and other drugs. They also described non-hospitalized individuals at times coming to the hospital to participate.

> Interviewer: Is it easy to buy [drugs] when you're in the hospital?
> 'Penny': Ah, usually ahm, sometimes we go outside and sometimes I'll ask…Walk by, got any hydromorphs, got a dilly for sale, trade or something like that…People just coming, walking around.

However, several patients had no knowledge of or connections to this market or when attempting to purchase drugs from these individuals they were met with mistrust. Some of these patients had been transferred from other areas of Alberta and were new to Edmonton or typically did not spend significant amounts of time on the streets or typically accessed drugs in other ways. Instead, these patients described purchasing drugs from new or different sources or having to search for or worry about accessing drugs to inject.

> 'Leah': I had people bring me pills, straight up no lies.
> Interviewer: Is it easy buying drugs here in the hospital, to inject?
> 'Leah': Not really. No, not really. Got to call.
> Interviewer: What is the experience like to be here in the hospital and then you have to buy [drugs]?
> 'Leah': It's like frustrating and like, it's frustrating but if you have connections it's not frustrating.

Certain patients diverted the medication dispensed by RAH staff by cheeking or pretending to swallow and instead dropping their medication in their shirts or pockets. These patients kept the medication to inject later or to trade or sell for other drugs.

> 'Andria': When you're in here, you have to always have somebody out doing something, right? Otherwise you can't cause how can I make money here? So that's kind of how they do it, is they have partnership. So, but with other people is what they do, is they would probably save up their pills, give them to so-and-so, and then have them sell them and then transfer into…like it's a whole process.
> Interviewer: So you're saying that how does the patient do they cheek the pill?
> 'Andria': Yeah, they would…or probably fake pour…cause you got your big shirt.

4.2.6 Patients injecting into vascular access devices

Nearly all patients had heard of, contemplated, attempted, or actually injected into their vascular access devices, particularly their IV and PICC lines. The primary reason for doing so was because it was easier than finding a new vein to inject into, which for many patients was a frustrating process. Patients also described the high as stronger when compared to injecting directly in their skin. Some of these patients described feeling anxious or nervous when attempting to or actually injecting into their vascular access devices because they were afraid the RAH nurses would catch them. Most patients were aware of the dangers of injecting into these devices, one patient described experiencing an overdose after injecting into her device. However, some patients did feel capable of keeping the devices sterile and did not seem anxious about the process.

> 'Dean': Mm-hmm. I've done it…It gets better, you don't miss or nothing, it's already there…Yeah. And it's safe to do it as long you're not doing a whole lot, you keep it clean like the nurses do, you clean it with swabs and that.

4.2.7 Drug overdoses while hospitalized at the RAH

Several patients had experienced drug overdoses in the past. These patients primarily described overdosing because they lacked the knowledge of the amount or type of drug or drugs to inject or that the drug they injected had been tainted with other drugs, primarily fentanyl. Two patients described experiencing drug overdoses while hospitalized at the RAH. These patients both

injected alone in their patient washroom or patient bed. Both patients were revived by hospital staff and to these patients the experience was traumatic and challenging to talk about.

> 'Allison': Oh wow, I overdosed when I was [here at the RAH] …He gave me some heroin as a treat and I didn't know that if you mix heroin with dilaudids or hydromorphs you can OD…I went to the washroom…all I remember is going to flag and then I don't remember anything.

4.2.8 Impressions of injecting while hospitalized

I also asked patients how they felt injecting while hospitalized, and particularly how they felt injecting in their patient room or washroom. A few patients told me they felt comfortable injecting while hospitalized and didn't feel anxious or rushed. These patients described injecting in their washrooms as safer, warmer, and cleaner than in their usual locations

> Interviewer: And what is that like, what is the experience like [to inject in your washroom]?
> 'Allison': I don't know, for me it's a good experience I guess. I'm not bothered, I'm left alone. Doing my own thing. I'm not in there long. I don't do the nod, so yeah.

However, most patients described feeling rushed and feeling guilty or anxious and described the experience as uncomfortable and awkward. These patients described fearing RAH staff, security guards, or other patients would walk into their room or washroom and discover them injecting. If this occurred patients feared experiencing negative repercussions. A few patients outside the hospital also felt the experience was uncomfortable and described rushing in order to not get caught.

> Interviewer: And regarding drug use in the hospital, is it easy to use while you're here?
> 'Penny': No…Kind of like you're, you're kind of on edge…I hear them come in.

> 'Owen': But even here, like in, I had [my drugs] hidden over there and I had it hidden over here and I was, how to put in a rig and try to get water. It took me like probably 12 hours to finally get up the courage to do it.

> Interviewer: And so how does it feel going outside and [injecting]?
> 'Thomas': I don't know, it's kind of nerve-racking and you know, just…I do feel guilty about it…really guilty about it like you know, but you know, I've been at this for years.

4.3 Patients' impressions of the NSP

4.3.1 Patient usage of the NSP

ARCH physicians and nurse practitioners thoroughly evaluate each patient by completing a clinical intake, during which they ask questions regarding a patient's medical history, current and previous drug use, need for social and other external services, and health and drug-use goals. The ARCH team member completing the intake also offers sterile injection supplies to those who report recent or active injection drug use and to those they suspect are injecting. However, any patient that requests supplies is given supplies. Any member of the ARCH team can dispense supplies, although supplies are typically dispensed by ARCH's PSWs.

Of the patients I interviewed, 16 accepted sterile supplies from staff, two accepted supplies but did not use them, and three did not accept supplies. All 16 patients that accepted supplies injected while hospitalized. Of the two patients that accepted supplies but did not inject, one injected a few times with his personal supplies and then decided he wanted to stop injecting so he returned the supplies ARCH had given him. The other patient threw away the supplies the ARCH team gave him away before injecting because he was afraid the nurses would find his supplies. The three patients who were offered supplies but refused all reported that they did not want to inject at the time.

4.3.2 Benefits of the NSP

The most common impression of the NSP amongst patients was that access to sterile injection supplies could help prevent the adverse health effects of using non-sterile injection supplies. While many patients described being aware of safer drug use practices, some of these patients also realized that consistently participating in these practices was challenging while hospitalized. As such, patients felt that having access to sterile injection supplies would reduce the

frequency of patients injecting with supplies they or others had already used, which would reduce or prevent the spreading of blood-borne diseases and the development of skin and other blood infections. Many patients felt that if someone typically reuses their supplies when they're outside the hospital, they would continue this practice while hospitalized.

> 'Candice': I think [the NSP] is actually really, really awesome that they have that offered here, because with a lot of people coming in and myself, you can get a bacteria blood disorders going on with using dirty needles and stuff and a lot of people are too ashamed to even admit that they're using needles and you know so they'll just keep doing it.

Other patients suggested that the NSP might reduce the anxiety some patients feel when they have to purchase or access supplies from outside sources and sneak in and hide those supplies within their patient rooms. Being given access to sterile supplies and a method of disposing of those supplies was convenient for patients and helped several patients feel more comfortable staying hospitalized and complete their treatment.

> Interviewer: So, a patient told you about it and then how did you get the rigs? Did you ask or?
> 'Justin': Yeah, I phone the ARCH team and they sent somebody over to my room and discreetly did it and they left and I thought that was a pretty good option being an addict where I wouldn't have to leave the hospital and go out and find some supplies.

> 'Stephen': Usually I'd be gone already trying to find myself what I need to get for pain or else just, like, for my addiction. I'd be out there, like, fucking off from the hospital, going AWOL, and stuff like that. And getting infected again, and you know, just putting myself at risk, right? And I find it's good, less easier for me to put myself at risk having the program here than having it not be here, you know?

Several patients also appreciated how the NSP was a means to accessing information regarding safer drug-use practices. Typically, sterile injection supplies are offered by ARCH physicians or nurse practitioners and dispensed by all ARCH clinical team members, but particularly ARCH's PSW. When supplies are offered or dispensed to patients, ARCH clinical team members normally provide the patients verbal and/or written information and advice on how to inject and use drugs in a safer manner.

> 'Justin': [The NSP] is a good idea I think having that kind of visibility for an addict to see that the can approach somebody and ask for supplies or just even talk to them about something like fentanyl for instance. And the ARCH team has more answers than questions, so they would all-in-all probably give the addict more insight and positive information into what certain drugs are…and a person wouldn't have to go out and risk their life and trying some kind of a drug or, you know, using a dirty needle or something like that.

While ARCH's physician, nurse practitioner, and PSW all provide safer drug use education, some patients in particular appreciated the opportunity the NSP gave them to interact with the PSW. Most patients felt more comfortable talking to the PSW about their drug use and as well appreciated how the PSW had been through similar life experiences. One patient told me, "you're not an addict so you don't really get it" but the PSW has "been down there…been there, done it". This ability to relate to him was quite powerful for some patients and a few even felt that patients would be more willing to accept supplies from someone with lived experience than from another member of the ARCH team.

> Interviewer: How did you feel using like taking needles from us?
> 'Andria': I'm fine…[PSW] seems easy to talk to…he's approachable…It's a big thing. Yeah. Cause I've seen some [doctors and nurses] you're like…cause it makes you think of like those Muppets, you know, in the front row, the men? They just sit there and like just talk to themselves.

4.3.3 Barriers to accepting supplies from the NSP

However, some patients described barriers to accepting supplies from the ARCH clinical team. One of the most prominent barriers was a lack of trust. Several patients had had previous negative interactions with healthcare providers and in particular had felt stigmatized and judged for their drug use. All patients stated or implied that they knew drug use was not typically accepted on hospital property. As such, several patients described feeling surprised or confused when they were offered supplies. A few patients even felt the ARCH clinical staff member who offered them supplies was trying to trick them.

> Interviewer: So, when you were first offered rigs, what did you first think?

> 'Thomas': I honestly didn't know what to think. I thought maybe I was being set-up or something, you know…That was my first thought is, you know, I'm being set-up like you know.

I then asked patients why they thought they were being tricked. If at other points of the interview patients described hesitating to accept supplies, I asked them to provide further detail as to why. I also asked patients what barriers existed to patients accepting supplies. Most patients felt they were being tricked or described feeling uncomfortable accepting supplies because they feared non-ARCH staff would be told of their participation. If non-ARCH staff knew patients had accepted supplies, they would be watched more carefully and staff would be more likely to catch them injecting or find and apprehend injection supplies in their room or amongst their belongings. Several patients were afraid of experiencing negative consequences from healthcare staff if this occurred, including being prematurely discharged or experiencing changes to their medication regimes. Most patients feared staff would modify or alter the amount or type of drug dispensed, or possibly change the mode of drug dispensation.

> 'Owen': It's like, so when [they] asked if I wanted some rigs, I thought it was some kind of trick to see if I had anything on me right. You know what I mean, it's like. You don't know right…told the doctors I'm shooting up and they come and check on. They catch me and kick me out, you know what I mean. Like, you know what I mean. So, it was kind of weird. It was like, didn't know whether to trust or, you know.

> 'Carl': Well that's on the doctors and the other staff then because if they find out that a person's using [the NSP] while they're getting you know, medications, well then they're going to withhold the medications, they're going to do things different with the medications, they're going to be interrupting the privacy and digging around in your stuff to see what you're doing…some people I've talked to here in the hospital…they're still [diverting and injecting their prescribed medication]. They're not going to tell the doctor that they're still using because then you know…when they get their pill…maybe they'll change the medication.

'Colin' even accepted supplies and then threw them away before using them because he did not want the nurses to find his supplies. If this occurred he feared he would lose his physician's trust, and his physician would make changes to his medication regime.

> 'Colin': Oh yeah, if [the nurses] see shit sitting here, they'd take it. PSW gave me some [supplies] and I should not have accepted them because if the nurse roger rounded through my shit here and found all that stuff. They'd tell [the doctor] that I'm using in here. Oh really. That's what they would've told him, yeah. So, I just kind of put everything in a bag and I threw everything out…Because I don't want to lose my doctor's trust.

4.3.4 Patients' experiences of RAH staff finding NSP supplies

While no patient described staff catching them in the act of injecting, several patients had experienced RAH staff finding NSP supplies or drugs in their room or amongst their belongings. The patients had either brought drugs or supplies with them when they came to the hospital or an ARCH clinical team member had provided them supplies. I then asked patients how RAH staff reacted when they found the supplies. A few patients described RAH staff pretending they had not seen the supplies. These RAH staff members did not change the way they interacted with these patients. Other patients described RAH staff finding their supplies and talking about active injection drug use in a respectful and supportive manner. However, these conversations typically did not move beyond discussing how to safely dispose of their syringes.

> Interviewer: And what happened when [the nurses] found [a needle]?
> 'Dean': They just asked me if I would, they brought me a sharps container and they just asked me if I would kindly watch what I was doing with my used syringes…And they gave me a sharps container to dispose of them.

However, some patients described having negative interactions with RAH staff when staff found their drugs or supplies. Some patients described RAH staff violating their privacy by going through their belongings and searching for drugs or supplies. Others said RAH staff just happened to see or find their supplies. When found, RAH staff typically confronted the patient, apprehended the drugs or supplies, and then took certain actions which patients interpreted as punishments. These actions included staff changing patients' medication regimes, staff threatening to prematurely discharge the patient, or staff observing patients or interacting with them differently.

> 'Dean': And I just like, last time I was in this hospital, well not the very last time, but last year when I first came to ARCH I was a junkie living on the street…This hospital caught,

> they found a cooker so they made me, what was it, oh yeah they made me do my meds in applesauce…So, I was buying meds while I was in the hospital.
> Interviewer: And so how does that make you feel?
> 'Dean': I was a little pissed off, but it was their rules so had to go along with their rules right in order to be in the hospital, to be getting those meds…I had to keep my mouth shut for them like now I know that. I'm supposed to keep my mouth shut…they'll probably kick me out yeah.

4.3.5 Patients are unaware of NSP policies and procedures

As the interviews progressed, it became clear to me that not all patients clearly understood the procedures of the NSP. Several of the patients described fearing non-ARCH staff would 'find out' they had accepted supplies or 'catch' them injecting in their rooms or 'find' their injection supplies or drugs. Given NSP procedures, all patients should have been informed that the time and date they accepted supplies would be noted on their hospital chart which is available for all RAH staff caring for them to see. However, most patients I spoke thought only the ARCH team knew they had accepted supplies. These patients typically described their participation in the NSP as a secret and something they didn't talk about with anyone but ARCH.

> 'Abby': I can commend this hospital for working toward the fact that they don't condone [drug use in the hospital] but they don't absolutely block it out either. They whisper in the corner to you and have [supplies], couple specific people working for you. They tell you, you know, use it because you're a user, not just to get high.

When I tried to understand how patients came to this understanding, it appeared that the ARCH team members offering or dispensing supplies to them at times did not fully or properly explain the procedures to them. Other patients could not fully remember what they were told and described their memories of their first days in the hospital as busy and hazy.

> 'Allison': Yeah and then I didn't know what to say, I didn't want to put myself in a rut or get myself in to trouble by saying yes, but [ARCH member] assured me that nobody would know, it's all good not going to tell anybody you know.

A few patients also stated they were not sufficiently informed by the ARCH team about what would happen if RAH staff found the injection supplies. These patients described fearing

negative repercussions if RAH staff found their supplies or drugs and described wanting assurance from the ARCH team that they wouldn't get in trouble if they accepted supplies.

> Interviewer: Okay so, when you were first offered supplies by (ARCH member), how did you feel?
> 'Dean': I wasn't sure what was going on 'cause I never, that's the first I heard of it was when he first gave me supplies.
> Interviewer: And what did (ARCH member) tell you?
> 'Dean': He made it seem safe, yeah. He explained himself and that. But he didn't explain what if the nurses find the needles or whatever, you know…And what are they doing to think if you're doing needles, sure you're gonna cheek your meds right.

4.3.6 Does the presence of the NSP trigger some patients?

I also asked nearly every patient whether being offered supplies would be a trigger for patients that were attempting to reduce or abstain from drugs. Some ARCH clinical team members have previously encountered concerns that offering injection supplies might not be appropriate in instances where patients indicate a desire to abstain from substance use while in hospital. While currently ARCH team members use their clinical judgment to decide to whom to offer supplies, patients' perspectives on the appropriateness of being offered supplies, and particularly if being offered supplies triggered them, was previously unknown.

Some patients stated that being offered supplies was not a trigger to them. They felt that patients should have the will power to refuse syringes if they actually want to stop injecting or they should be able to refuse and ask the ARCH team not to offer them supplies again. Some of these patients felt that PWID who were attempting to abstain from substance use were constantly triggered and that claiming to be triggered by the NSP was simply an excuse.

> 'Kenneth': So, me like right now knowing that there's needles here that I can access easily and knowing that I have narcotics, access to narcotics that typically I could inject if I wanted to. It's not really a, it really has no bearing with me.

However, a few patients did feel being offered supplies would facilitate some patients continuing to inject or it would trigger some patients to return to or increase the amount they were

injecting. A few of these patients described being triggered themselves and felt that they and other patients would not be able to refuse accepting if they were offered supplies.

> 'Allison': Yes [it's a trigger] …It's hard to not, not want to do it, if you see a clean rig there. I'd like to say no, but honestly, I think I'd just be lying.

4.4 Presence of the NSP and effect on patients' views of the RAH, its staff, and the care they provide

I also asked patients if they felt the NSP had had an effect on their view of the RAH, its staff, and the care they provided. A few patients had had positive experiences using the NSP, however, in their opinion the NSP did not change their impressions of the RAH. However, many patients interpreted the NSP as a sign that the ARCH team had their health as priority instead of requiring abstinence from drugs. By providing supplies and accommodating their drug use, the ARCH team demonstrated their willingness to respect patients' wishes and compromise with patients regarding their hospital stay and care plan. These patients felt the NSP improved their impressions of and trust in the ARCH team and drew them to seek care at the RAH and complete their treatment.

> Interviewer: Are you more, or less, willing to stay here in the hospital because of the ARCH program and the needle exchange program?
> 'Leah': More willing…ARCH has done good…ARCH is a good program, for sure. See more of it in other hospitals…That's another reason why I keep coming back to this place, even though they did shit jobs on me, because ARCH…they're a big help to a lot of addicts…my friends say nothing but good stuff about ARCH…they do their best for you and understanding and they listen and you can tell them anything.

> Interviewer: What did you think when you first heard about [the NSP] here?
> 'Penny': Oh, I wanted to come here when I got sick. Told a few friends about it. Yeah.
> Interviewer: Do you think having a needle exchange program here, does it make it?
> 'Penny': Easier, way easier…I like coming here and that's because of ARCH…Whenever I have come here, I'd rather come here. Yeah…I wouldn't come here if it wasn't, because of ARCH.

4.5 Patients' suggestions to change or improve the NSP

I asked several patients what changes could be made to increase trust or patient participation in the NSP. I also asked patients how the ARCH team could improve how supplies are offered or dispensed to patients or if they could suggest any modifications to the NSP.

4.5.1 Improve patients' privacy

Some patients felt that the ARCH team should make a patient's participation in the NSP more private from RAH staff. These patients knew that RAH staff had been told of their participation in the NSP. This NSP policy was challenging for them to accept and they felt patients would feel more comfortable accepting supplies from the NSP if they knew only ARCH team members would be informed of their participation. Patients described feeling more comfortable talking with members of the ARCH team and also fearing negative repercussions from RAH staff.

> 'Kenneth': Yeah, if you just said to the patient, oh by the way, just in case you didn't know we're handing out rigs now so if you need any just ask and that's all they said. I think some people would be like what, you know, I can ask for what, are you kidding me, like…That's going to seem a little strange to most…But if they're given the rigs, they're saying that basically, this is you know for solely nothing more than…clean usage and safeguarding against disease and whatever else, nobody's questioned, nobody's told nothing basically…end of discussion.

A few patients even felt that patients should be able to access supplies without even the ARCH team knowing. These patients felt that there would always be certain patients who feared or lacked trust in healthcare providers and would only accept supplies if it was anonymous.

> 'Interviewer': What do you think are some ways we can improve the Royal Alex for people who use drugs specifically?
> 'Ruth': For the people who don't like to say, keep their drug usage to a bare minimum that they are very discreet about their drug usage. Maybe they don't per say need you, the ARCH people to be part of their pain medication distributor or whatnot but they might need the supplies and stuff.

4.5.2 Ensure patients feel comfortable and are safe accepting supplies from the NSP

If a patient's participation in the NSP must be noted on the hospital chart, several patients suggested that the ARCH team should still attempt to make patients feel more comfortable accepting supplies. Some patients suggested that ARCH staff should get to know patients better before offering supplies. These patients felt that if patients were able to establish a relationship with the person offering them supplies, they might feel more comfortable with the fact that RAH staff will know they participated.

> 'Allison': Ahm, I don't know, I just do. The only way would be if PSW got to know them better, like the way he does, go visit them. Yeah, so, not so it wouldn't be like on a professional level, it would be on a friendship level. Yeah. Because you trust your friends right.

Some patients stated that another way to make patients feel comfortable accepting supplies is to ensure that RAH staff won't treat patients that accept supplies negatively or change their medication regimes. Again, not only did patients feel belittled when staff checked their cheeks for medications or crushed their medication in applesauce, but it also meant that patients could no longer divert their medication to inject. Patients that could no longer divert their medication to inject had to then go to the trouble of gathering funds, finding drugs to purchase, and then purchasing and accessing those drugs, all of which could be challenging to do from the hospital.

> Interviewer: You know we don't want patients to reuse old rigs, we want to give them new rigs, but how do we make them feel comfortable accepting clean syringes from us?
> 'Dean': Knowing that they're safe getting them…try to take their meds away from them or try to put their meds in applesauce.

4.5.3 How to prevent triggering patients

I asked some patients how members of the ARCH team could prevent triggering patients. Several patients felt that triggering patients could not be easily prevented, but the benefits of offering supplies outweighed the risks. These patients suggested the ARCH team should get to know patients before offering supplies so they can better understand where the patient is at in their drug

use. ARCH team members should use their judgment and typically not offer supplies to patients that have stated or implied they want to abstain and are feeling triggered. Patients also felt that some patients could be given a pamphlet that mentions the NSP and how to access supplies. This would be a less direct method of informing patients of the NSP, which would allow them to think about whether they want to accept and are ready for RAH staff to know they are actively injecting.

> Interviewer: So, how do you think that we can make sure patients are safe, but would not trigger them?
> 'Elsa': I'm not sure, like, maybe just have a pamphlet around saying that there's needles that are offered to the patients and that to ask the nurse or the ARCH team.
>
> 'Dean': Maybe sit down and talk to them.

4.5.4 Increase awareness of the NSP

Several patients suggested the ARCH clinical team should increase awareness of the NSP in order to increase patients' usage. According to these patients, not enough patients knew of the possibility of receiving supplies. Patients suggested ARCH use signs or pamphlets, or hire peer support workers or representatives to spread the word regarding the existence of the NSP amongst the street-involved downtown Edmonton community.

> 'Leah': [The NSP is] a real good thing because people don't even know about it that shit. They don't say it too much you know. Maybe they should say a little more because people don't even know they can get free rigs here. Clean rigs…because I do give people mine.
> Interviewer: How do you think we could get more people to know about it?
> 'Leah': Maybe put up signs…pamphlet…like a number…if they'll do it discreetly you know…No one wants to anybody's using needles when in the hospital.
> Interviewer: What do you think should be in a pamphlet?
> 'Leah': Everything that you guys do. You guys help with the medication. You help with the harm reduction. You got people that you can talk to. You can help with TV's. You can help with housing. You can help with everything…Have the harm reduction in there for sure.

4.6 Patients' suggestions to change or improve care for patients who inject drugs at the Royal Alexandra Hospital

4.6.1 Improve the ways RAH staff treat and interact with patients who use drugs

I also asked patients if they had any suggestions to change or improve patient care for PWID at the RAH. Moreover, I asked if they had any general or unrelated suggestions to change the RAH and the care its staff provide. Several patients felt that RAH staff members should receive training on how to interact with and treat patients who use drugs. For example, 'Ruth' had mentioned how ARCH patients sometimes encounter stigma in acute care settings from RAH staff due to their participation in ARCH. When I asked her what the ARCH team could do to help reduce that stigma, she suggested that RAH staff receive education on the challenges people with substance use disorders face and given tools on how to treat patients who use drugs respectfully and equitably.

> 'Ruth': Maybe educating other doctors and nurses. Having a, what's that called, like a staff meeting. Each unit, different units, each different unit calling them into a staff meeting. ARCH people giving them a little bit of awareness or some sort of in-service or something.

Other patients suggested RAH staff should be more open to talking with patients about their drug use and they should do so in a courteous manner and also be willing to make compromises with that patient.

> 'Kenneth': I would just say as far as on the health care side is, being open minded and maybe really listening to the patient, I think it's important.

4.6.2 Establish an acute care supervised consumption service

4.6.2.1 Need for an SCS at the RAH

Many participants also directly stated or implied a need for a supervised consumption service for patients. During my first interview, the patient mentioned how he frequently used in the [fast food restaurant] washroom across from the RAH and how the experience was uncomfortable for him and led to him rushing while injecting, causing him to unintentionally inject subcutaneously or intramuscularly. After I asked him how the RAH could improve its care for PWID, he replied by

stating PWID should be given private rooms where they can use in relative peace and not feel rushed. I then asked him about the SCS called Insite in Vancouver, B.C. He had in fact been to Insite and described having a positive experience there as a client. I then asked him what he thought about ARCH establishing an acute care SCS. I then began to ask every patient for their perspectives of an acute care SCS. Upon further inquiry, three patients stated they had used the services at Insite in Vancouver. And although I did not mention the SCS during the consent form process, seven patients described or stated a need for an SCS in Edmonton or the RAH prior to me asking them about an acute care SCS.

> 'Ruth': I'm not sure where I'm supposed to go and use in the hospital though…Where do we go to use?
>
> 'Silvia': I think what would be good is you guys have ARCH office. You guys have everything that everybody needs to do, what they need to do. My only problem with that is what they should do is have…you guys should have a little booth like respond to whatever. And you know have your team outside or whatever you guys do.

Some patients told me that to them it didn't make sense for the ARCH team to dispense supplies but not provide a safe place where patients can use. 'Oliver' gave an example of when he was at a community health clinic and he saw someone given supplies but not provided a place in which to use.

> 'Oliver': I was, [clinic] there, they were giving out supplies and somebody was using out the front of the building and they just got the supplies put in. They then tried kicking them off the property. It's like, well, can't be hypocritical here.

4.6.2.2 Benefits of an acute care supervised consumption service

Several patients mentioned benefits that an acute care SCS would provide hospitalized PWID. These patients thought that an acute care SCS would help reduce rates of unsafe injection practices, such as rushing or sharing syringes, and as a result reduce the transmission of blood-borne infections. A few patients also felt an acute care SCS would provide a means for patients to access safer injection education and supports. Other patients felt that those who struggled to find veins

would receive help injecting and they would also be given advice on which drugs to use and how much. Some patients also felt that an SCS would reduce the rate of accidental drug overdoses. Evidence from studies completed at SCS in community settings indicate that patients that attend an acute care SCS may experience many of these benefits services, including a reduction in rates of syringes sharing and reuse and also public injecting (Potier, Laprevote, Dubois-Arber, Cottencin, & Rolland, 2014, p. 62).

> 'Oliver': I do agree with like, there should be a safe place to go and do, like Vancouver, whatever they have, shops and corners…I like that, [an SCS] is a really good idea. To prevent people from overdosing. Prevent people from getting diseases or whatnot…A lot of people just end up overdosing or whatever in the bathrooms…People are getting into trouble. Getting arrested. Getting overdosed. Whatever, right. Still not doing it properly. Still sharing needles. Dirty rigs, whatnot. I think it would benefit a lot of people…They should have a safe place to do it there. Especially if they're giving the supplies, they might as well supply a safe place.

Some patients also described an acute care SCS as a warm and safe location when compared to other places where patients typically inject, such as outside or the bathroom. These patients would also have a location to safely dispose of their syringes, which would help reduce the rates of needle litter in the hospital and surrounding community. Some patients also felt an acute care SCS could act as a place where patients could go to be accepted and they could help maintain their dignity by not having to publicly inject and risk being discovered.

> Interviewer: And what do you think about the supervised sites? Do you think your friends would use it?
> 'Candice': Oh for sure definitely. They would rather go to a supervised one than the can. I would rather go to a supervised spot where it's being offered, especially acceptance. You know what I mean, is the biggest thing. 'Cause they're accepting people to want to come there and use then there's going to be more people coming to use it.

> Interviewer: What do you think about [an acute care SCS]?
> 'Justin': I think that's a really good idea. I think it would save people, I guess, a lot of embarrassment, a lot of hassle. And safety, that's the number one concern. I guess that's why they're having safe injection sites is so that if a person does have addiction problems, they can do it in a safe environment, inject and not have to worry about stepping on someone's toes or making a neighbourhood look bad.

4.6.2.3 Barriers to patient participation in an acute care SCS

Many patients, however, described barriers patients might encounter when accessing an acute care SCS. These barriers often mirrored the fears patients felt towards the NSP but were more varied and amplified. Most patients realized that hiding their participation in the SCS would be more challenging and that RAH staff would be more likely to know they had participated. If RAH staff knew of their participation, patients feared they would encounter judgment from RAH staff or experience changes to their medication regimes, including having the amount or type changed or having their cheeks checked for medication or having their medication crushed into applesauce.

> Interviewer: And so just curious, but, why do you think patients wouldn't want the doctors to know [that they're using the SCS]?
> 'Colin': Why would they want their doctors to know that they're misusing their pain meds from the doctor would cut them off.

Several other patients feared negative encounters with security guards or police officers. These patients feared they would be watched or followed and then would be searched for drugs or injection supplies.

> 'Carl': People don't want to be seen [using an SCS] because then the doctor's going to know they're on drugs number one…and then the police are going to be watching who, it's a lead for them, who is using again and where he got his dope and going to shake him down…or go you know follow him to see where he goes…the old time junkies and stuff they'll go in there and do it anyway, right…the new addicts don't want people to let anybody see them doing it.

All patients that used stimulants felt that they and other patients who used stimulants would be more hesitant to use the SCS and two patients held personal reservations of an acute care SCS. One patient felt that an SCS might facilitate drug use and not encourage patients to quit, and the other patient felt an SCS wouldn't solve the underlying problem of drug use, only decriminalizing drugs would.

4.6.2.4 Policy and procedures at an acute care SCS

Many patients also felt that patients should be able to use the SCS and keep it private from non-ARCH healthcare providers and other patients. Similar to participating in the NSP, these patients feared RAH staff would treat them differently, prematurely discharge them, or change their medication regimes. Patients also feared other patients would judge them and interact with them in a rude manner.

> Interviewer: Another question we had for you, if we had one here at the hospital, do you think maybe you would use it, or other patients would use it?
> 'Ruth': Absolutely. And it would be anonymous, nobody would be able to tell anybody else you were there.
> Interviewer: It would have to be completely private from your doctors and nurses on the ward?
> 'Ruth': Yeah and from the patients.

> Interviewer: Do you think that patients' doctors and nurses should know that they're using the site?
> 'Thomas': Actually, I don't think so…because right away they're going to be…almost immediately kicked out probably, because doctors and the nurses are going to assume that you're getting the stuff to…the pills to shoot up, you're getting it from the doctors and nurses here, you know?

Some patients did feel, however, that the non-ARCH doctors and nurses on the wards should know if a patient is a client at the acute care SCS. These patients felt it would improve the health of patients because the doctor would know exactly what and when patients were using. It would also provide an opportunity for patients to connect with and interact with nurses who could provide education and assistance to improve their health and wellbeing.

> Interviewer: Do you think the doctors and nurses on the ward should know that you're using…the supervised injection site we talked about?
> 'Abby': Absolutely they should be in touch all the time. Primarily if something happens really bad, it's going to be the doctors that are going to be taking care of them.
> Interviewer: Why do you think some patients don't want their doctors and nurses to know they're using?
> 'Abby': A lot of nurses and doctors find out stuff like that and they look at it and freak out. They freak out thinking this thing is going to attack them. That's what intimidates them and every intravenous drug user is a violent and out of their mind psycho.

Several patients described how they envisioned an SCS at the RAH. Regarding location, most patients suggested the SCS be located in an accessible but semi-secluded section of the RAH with an exit to the outside. This appeared to be so other patients and visitors wouldn't see patients enter the SCS and also so patients and others could easily leave and enter the SCS. Patients also suggested that the ARCH team hire people with lived experience to work at the SCS. These patients felt this would help reduce patients' anxiety and increase trust in the SCS. Other patients suggested the ARCH team have a time limit, entertainment activities, and food and coffee for patients. A few patients also suggested the ARCH team have rules against trafficking and violence, and also specific security guards to ensure the safety of patients, but as well prevent other security and police officers from arresting patients.

> 'Kenneth': Oh I don't want to go in there and what happens when I come out, if I'm still holding, the cops jack me up and they follow me or they're doing surveillance or intelligence. You know I think there has to be a real, a real open line, let's say of communication between like EPS and the health care system in the hospital…nobody wants surprises and word travels fast…especially on the streets…So, if they had let's say for instance a place like that opened up here and there was any kind of shady action going on where people are coming and being told here's a safe place you can use in a safe manner…then people are leaving getting busted…That's going to travel and people aren't going to want to come.

Two patients suggested the ARCH team allow peer-assisted injecting or allow friends of patients to use the SCS as well. One patient even described how she had seen people who aren't patients come to the RAH and use the washrooms for a place in which to inject. According to this patient, non-patients may be interested in using the SCS and allowing access to this population might be something to consider.

4.6.3 Other services the RAH may want to consider providing

Two other patients expressed a desire for ARCH staff to provide ports with which they could inject without having to puncture their skin each time. This would help reduce the stress of attempting to find a vein each time they injected.

> 'Silvia': I wish I had a site where right now I could keep it and it's stay in…instead of doing it the way I do it and sticking all these holes and making all these scars…I think if you're in [the RAH] what they should do is give everybody…a little site where it's always going to be blood coming out…then you flush it and then you lock it…people are not getting their shot, because they're wasting it, because they can't get…a line.

Three patients suggested the ARCH team allow patients to inject their prescribed medication. For these patients, being allowed to inject their prescribed medication would remove the need for patients to divert their medication and risk getting in trouble for RAH staff. It would also ensure patients aren't injecting illicit drugs of an unknown quality.

> Interviewer: What are some of the barriers to patients using [the SCS]?
> 'Stephen': The fear of getting cut off on your meds and I don't know they should be able to get their like the meds that they're going to be doing. That way they should be able to get it at the injection site. Like, you know, how you ask for your meds and the nurses bring it to you, you should be able to get it at that spot too.

> 'Silvia': I was saving my pink pill and I had it in my hand and I fell asleep and I kind of dropped it...when [the nurses] got me in the bed, I seen the pill and I grabbed it. [A nurse said] "Give that back to me" and I'm like, "No". So, I kept it in my hand and [the nurse] goes, "Swallow it." Yeah, okay, I'll swallow it. I took a couple sips of my drink and then lo' and behold, it's still not swallowed. 'Cause if I don't get it here, I will go out downtown and get it down there.
> Interviewer: Are you saying that the nurses need to...would it be better if the nurses just allowed people to inject their pills that way they didn't have to go buy things on the street?
> 'Silvia': I think…I would say, yeah. 'Cause they know what's on the street now…There's all that fentanyl…horse tranq, cow tranq.

Chapter 5 Discussion and Conclusion

5.1 Chapter introduction

Patient-oriented research aims to capture patients' perspectives of an intervention. The goal is to deliver cost-effective, timely, and appropriate care that is respectful a patient's history and unique needs and desires (Canadian Institutes of Health Research, 2011, iii, 1-2; Sacristan, 2013, 4). Using this framework has enabled me to develop research findings that provide guidance to the ARCH team, RAH, and other acute care settings on the provision of acute care NSP services to hospitalized patients who inject drugs.

In this chapter I discuss in detail the salient themes identified during my data analysis and address my research questions, which were:

1. How do ARCH patients experience care at the RAH?

2. How do ARCH patients who inject drugs perceive the acute care NSP?

3. From the patients' perspectives, what modifications or improvements can be made to the NSP?

I conclude with a list of recommendations for improving hospital care for patients who inject drugs at the RAH or other acute care settings.

5.2 How do ARCH patients experience care at the RAH?

Extant literature indicates that acute care settings constitute a 'risk' environment for PWID, who may encounter stigma and judgment, experience poor pain and withdrawal management, and continue to inject while hospitalized to cope with these stressors (Breitbart et al., 1997, p. 235; Buchman et al., 2016, p. 1397; McNeil et al., 2014, p. 60, 62; Pauly et al., 2015, p. 122-5; Rhodes, 2002, p. 88). Many of the patients I interviewed had similar experiences while hospitalized at the RAH. My study builds on this existing literature and fills key knowledge gaps by providing greater

detail on the motivations and experiences of those that inject drugs while hospitalized and also their perspectives of receiving care from a specialized addiction medicine consultation team.

Previous studies have primarily highlighted the role of poorly managed pain in patients' motivations to inject while hospitalized (McNeil et al., 2014, p. 62). However, in my study, patients described or implied more varied and complex motivations for continuing to inject in the hospital. These motivations included to manage symptoms of both pain and withdrawal, but also out of habit, boredom, or to experience pleasure. Several patients described more than one motivation for injecting, and having their pain or withdrawal symptoms controlled did not necessarily result in suspension of injecting. These findings suggest that at least a subset of PWID may continue to inject while hospitalized irrespective of pain and withdrawal management interventions received. This is consistent with the sequelae of substance use disorder, in which a portion of PWID continue to use drugs even irrespective of prohibitions and real or potential negative sanctions (Grewal et al., 2015, p. 500-501; Haber et al., 2009, p. 1288). Thus, hospitals aiming to improve care for PWID need to consider adding or bolstering strategies for accommodating active drug use, alongside concerted efforts to improve pain and withdrawal

Patients also described injecting in various locations in and surrounding the hospital (i.e. bed, washrooms, bushes and trees, parking garages) both alone, and with others. These patients also described illegal drug trafficking activities at the hospital where patients and visitors sold, traded, or bought various pharmaceutical and street drugs. Some patients also reported diverting their medication (for their own use, or for sale or exchange with others) by 'cheeking' their pills, while others reported attempting to, or actually injecting into their vascular access devices.

Some publications have noted the practice of inpatients 'cheeking' their medications for unsanctioned use (Wexner Medical Center, ND, p. 1) and injecting into their vascular access devices (Hawes & Willegal, 2017, p. 33; Ho, Archuleta, Sulaiman, & Fisher, 2010, p. 2642; Mallon, 2001, p.

157). However, most of this literature consists of case reports or policy manuals, all described these practices as ones to be prohibited, and none elicited patients' descriptions or perspectives of these phenomena. Additionally, I could find no previous quantitative or qualitative research describing drug trafficking activities on hospital property.

Beyond detailed information on drug use in hospital, my study adds to the literature on appreciable barriers and challenges some Indigenous people of Canada, including First Nations, Metis, or Inuit, and in particular Indigenous PWID face when accessing care in acute hospital settings (Browne et al., 2011, p. 335; Goodman et al., 2017, p. 88, 91; McNeil et al., 2014, p. 62; Tang & Browne, 2008, p. 123). An estimated 5.4% of Edmonton's population identifies as Indigenous (Alberta Government, ND). However, a recent study of 303 ARCH patients found that 42% reported Indigenous ancestry and 81% (n = 17) of the patients I interviewed identified as Indigenous. Several Indigenous participants described experiencing judgment, stigma, or inferior care from RAH staff that they attributed, at least in part, to discriminatory views or assumptions held regarding Indigenous people.

Also, I could find no other study describing the existence of an addiction medicine team similar to ARCH that offers harm reduction services and is integrated into an acute care hospital (Salvalaggio et al., 2016, p. 37). As such, my study adds to the literature by highlighting the benefits of integrating a patient-centred and harm reduction approach to care into an acute care setting. Several patients described the ARCH team as more relatable than other hospital staff, and as treating them "like human beings". These patients appreciated how the ARCH team attempted to make collaborative decisions regarding their medication, or other treatment regimes. Crucially, for some patients, the ARCH team believed their descriptions of pain and withdrawal symptoms and attempted to match the doses prescribed to their own self-reports of what they were using prior to

being hospitalized. This was appreciated by these patients because not accounting for a pre-existing high level of tolerance for opioids results in undertreating pain and withdrawal (Alford, 2006, p. 3; Berg et al., 2009, p. 482). For a few patients, the ARCH team was the primary reason they presented to the RAH, and stayed long enough to complete their medical treatment.

5.3 How do ARCH patients who inject drugs perceive the acute care NSP?

Injection drug use has been known to occur in acute care settings (McNeil et al., 2014, 62; Grewal et al., 2015, p. 499). Indeed, Canadian cohort data suggest that 44% of PWID report injecting drugs while hospitalized (Grewal et al., 2015, p. 499). NSPs are a core harm reduction intervention for PWID and have been widely implemented in community settings in Canada (Stone, 2016, p. 9). Yet despite research indicating that for harm reduction policies to be effective they must be implemented where people are injecting drugs (Moore & Dietze, 2005, p. 276; Strike et al., 2014, p. 641), this study was the first to analyze any aspect of an NSP located within an acute care setting and targeting hospital inpatients directly.

Participants in my study described several benefits of the ARCH NSP. Patients felt the program helped reduce sharing and reuse of syringes and resultant incidence of blood-borne or other infections. Patients also felt it provided an opportunity to access safer drug-use information and supports from the ARCH team and its PSW. These reported benefits are consistent with the literature describing community-based NSPs (Macneil & Pauly, 2011, p. 29-30; Degenhardt et al., 2010, p. 286). In addition, patients reported that the ARCH NSP reduced the need to leave the hospital to purchase or access sterile supplies, and reduced the anxiety of having to sneak in supplies out of fear of being caught.

Patients also described the NSP as a sign the ARCH team was primarily concerned with their health and wellbeing as opposed to enforcing patients' abstinence from drugs. Being offered

supplies was viewed as an indication that the ARCH team understood the complexity of substance use, and patients' backgrounds and current realities. Patients described feeling that they and the ARCH team were on 'the same page' and this affinity appeared to foster trust and facilitate patient-provider communication.

Other patients described the NSP as a sign that the ARCH team respected their autonomy, or were willing to compromise with them regarding active drug use in the hospital. These patients appreciated the degree of power and control the ARCH team afforded them over their own care trajectory. The fact that they were given options instead of being told "this is what you don't do and that's it" was particularly appreciated by participants. This was a novel experience for these patients, who described other RAH staff as controlling most of their care. The autonomy and respect granted by the ARCH team appeared to in turn increase patients' respect and confidence in the pharmaceutical and treatment choices and recommendations made by the ARCH team.

McNeil et al. (2015) have suggested that social-structural forces typical of acute care hospitals such as the RAH, including racism or stigma towards minority patients (i.e. Indigenous, PWID, transgender people), and risk management policies that shape a healthcare provider's decision to acknowledge or accommodate active drug use, may inhibit or constrain patient-centred harm reduction interventions such as an NSP (p. 686). These forces were evident in my study. Some patients who were participating in the NSP for the first time described feeling tricked or confused, and these and other patients also described feeling uncomfortable accepting supplies. To these patients, accepting sterile supplies appeared to equate to admitting to active drug use, which all patients understood was typically not permitted on hospital grounds. It appeared that to these patients, being offered harm reduction supports in an environment that they assumed, or had previously experienced, as being abstinence-oriented seemed contradictory to them. Patients feared

that even though ARCH may accept ongoing injection drug use amongst patients, other RAH staff would not accept this behaviour and impose sanctions for it.

This salient NSP access barrier was exacerbated by patients' lack of knowledge or understanding of the NSP's policies and procedures. Many of the patients I spoke to thought that RAH staff did not know they had accepted supplies (i.e., that their participation in the NSP was confidential to members of the ARCH team, and not noted in their hospital chart). Also, no participants described the ARCH team explicitly discussing what would happen if they were caught with supplies or injecting in their rooms or into their vascular access devices, or diverting their medication.

Alberta Health Services has passed a 'Level 1 policy' recognizing harm reduction as one of several appropriate approaches to caring for people who use psychoactive substances (Alberta Health Services, 2013, p. 1). The RAH does not have a formal zero tolerance policy for substance use. As such, it is expected that patients will not be sanctioned and prematurely discharged by RAH staff if caught with supplies. The ARCH team operates as a consult service and other RAH physicians and nurses still have direct authority over patients on the hospital units. Thus, even though extant hospital policies allow for treating patients with a harm reduction approach, RAH staff can still exercise their own authority regarding when and for what reasons to discharge a patient or change aspects of their care plan (Martin et al., 2018, p. 15). A lack of formal site or organizational policy mandating a harm reduction approach for PWID likely explains the conflicts between the ARCH team's approach and that of some hospital staff reported by patients in this study.

5.4 From the patients' perspectives, what modifications or improvements can be made to the NSP?

No study has been conducted on an acute care NSP. The ARCH team did not have literature to guide their ad hoc implementation of the NSP, suggesting a need to carefully monitor and evaluate the program's implementation. Given my patient-oriented research approach, I chose to directly ask patients how the program was working and what modifications or improvements they would like to see made to the NSP.

5.4.1 Clarify NSP rules and patient and staff responsibilities

When I asked patients how they felt the NSP could be improved, many patients implied or directly told me that they needed to feel safe accepting supplies. Several patients at first thought the NSP was a trick or others hesitated to accept supplies because they were confused or uncertain about the concept of an acute care NSP. Even after accepting supplies, several patients described a need for their participation in the NSP to be private from RAH staff or greater clarity and certainty regarding how accepting supplies would impact their stay. Again, this situation was exacerbated by patients not clearly knowing whether RAH staff knew they had accepted supplies. In order to reduce this anxiety, patients conveyed a need for the ARCH team and the RAH to establish official rules regarding how RAH staff can interact with patients who accept supplies and what responsibilities patients have when they accept supplies.

Patients described wanting to know where and when they could inject and with what drugs. Patients also wanted to know what would happen if RAH staff found their supplies or drugs, or caught them diverting their medication or injecting in their rooms or elsewhere in the hospital or in their vascular access devices. Once rules or guidance for both patients and staff have been established, the ARCH team should more clearly, and, if necessary, repeatedly explain them to

patients. With clearer guidance, RAH staff may provide more consistent harm reduction care and ARCH patients may feel more comfortable accepting supplies.

5.4.2 Increase awareness of the ARCH team and the NSP

Patients also suggested the ARCH team increase awareness of its NSP. These patients felt not enough people knew that they could access sterile supplies while hospitalized at the RAH. Patients suggested that the ARCH team put up posters that describe the ARCH team and its NSP in community organizations such as the Boyle Street Community Services and the Boyle McCauley Health Centre. Patients also suggested that the ARCH team distribute pamphlets that describe the ARCH team and its NSP to patients. To increase patient safety, the ARCH team should continue to offer supplies to all patients that describe or present with active injection drug use, or have a history of injection drug use. However, patients that refuse supplies or deny active drug use could be given a pamphlet, which would allow them to contemplate the NSP and also provide them with information on how to access ARCH and request supplies at a later time.

5.4.3 Provide a safe place for patients to inject

The ARCH team had been planning to construct an acute care SCS at the RAH from the initiation of my research project. However, when I developed my initial interview guide I did not include questions regarding the ARCH SCS because I did not consider it within the scope of the project. Yet the first patient I interviewed described a need for an acute care SCS without prompting from me. This may have been influenced by proposals to construct SCSs at three community agencies in Edmonton, which were in the news at the time of the interviews. The comments from this patient made it clear that an SCS was related directly to the NSP. Therefore, I decided to incorporate questions regarding the SCS into the interview guide, and I received detailed feedback from patients.

I completed a brief search of the literature and I found only one qualitative study that captured the perspectives of patients who used an SCS located in a hospital setting. However, this SCS was located in a sub-acute HIV care facility, in which all healthcare staff practiced harm reduction, and also all interviews were completed with patients who had already used the SCS (Krusi et al., 2009, p. 638). My study adds to the existing literature by providing detailed prospective patient feedback on a proposed SCS to be located in a large tertiary hospital.

At the time of my interviews, patients lacked a safe location where they could inject. For several patients, providing them sterile supplies but not a safe location where they could use those supplies did not make sense. Patients felt that having an acute care SCS would increase patient safety by reducing the frequency of unsafe injection practices including injecting alone, hurriedly injecting, using non-sterile supplies, or the improper disposal of supplies. Patients also described wanting help injecting and wanting other drug-related advice and access to social and emotional supports. In particular, patients described wanting a supportive and accepting environment where they wouldn't receive judgement for their drug use. These findings appear to be similar to the findings of Krusi et al. (2009) who found that study participants reported the sub-acute SCS promoted participation in safer injection practices and facilitated the development of trusting relationships with staff (p. 641).

However, several patients described concerns with an SCS at the RAH that generally mirrored patients' concerns regarding the NSP. Patients wanted to know how their participation in the SCS would affect their hospital stay. Some patients described fearing they would be arrested by the police or prematurely discharged. Others anticipated that RAH staff or other patients might judge them or interact with them in a more negative manner. In particular, patients feared changes to aspects of their medication regimes, including adjustments to the type or amount of medication dispensed, or method of dispensation to prevent diversion. Patients that weren't diverting feared this would lead to increased pain while patients that were diverting feared they would lose a convenient

drug source. These barriers to participation in acute care SCS fill a knowledge gap as they were not described by Krusi et al. (2009) given that the sub-acute SCS under study was located within a ward where all staff practiced harm reduction and had speciality training related to managing injection drug use.

As such, if patients are to trust the SCS they must be given clear assurances that RAH staff will not interact with them differently or change aspects of their care plan or medication regimes because they chose to participate in the SCS.

5.5 Negative case analysis

I chose to use the criteria for rigour suggested by Janice Morse (2015, p. 1213). Morse supports negative case analysis as a means to help ensure validity. Morse suggests that negative case analysis in semi-structured interviews involves discussing which research questions were not answered or which interview topics were not sufficiently described in detail (Morse, 2015, p. 1217).

My research questions aimed to understand how ARCH patients experienced the RAH and ARCH's NSP, and, from their perspective, what modifications or improvements could be made to the NSP. I believe I was able to capture substantially rich data on patients' experiences receiving care and injecting within the RAH. I was also able to elicit considerable feedback on patients' experiences being offered and accepting supplies from the ARCH team and how they felt the NSP could be improved. However, the most substantive NSP feedback related not to the internal processes of the NSP itself, but more how patients' lacked clarity regarding how they and the NSP fit in within the rules, expectations, and culture of the RAH. I believe this occurred primarily because RAH staff have final authority over the care of hospitalized patients and also currently RAH staff have not been provided guidance or formal directives regarding how they can interact with patients who use the NSP. Once guidance is established, RAH staff may adhere to the suggestions and ARCH patients may experience greater consistency in how RAH staff interact with them

regarding their drug use and participation in the NSP. After this occurs, a secondary study may be conducted to elicit greater detail on the benefits experienced by patients and how the internal procedures of the NSP can be improved.

5.6 Recommendations for policy and practice changes to improve delivery of the NSP and improve care for PWID at RAH

5.6.1 Response to patients' recommendations for improvement of the NSP

Extant literature acknowledges the risks PWID often face when hospitalized and the benefits they may experience with the integration of patient-centred and harm reduction interventions into care (McNeil et al., 2015, p. 687; Pauly, 2008, p. 202). However, research suggests the success of these structural changes within hospital settings, such as the distribution of sterile injection supplies, is facilitated or constrained by the existing social, physical, and policy forces already in place (Rhodes, 2002, p. 87).

Many patients appreciated the ARCH team's approach to care and described feeling comfortable accepting supplies from them. These patients suggested more patients might benefit from accessing supplies through the ARCH team and they suggested the ARCH team increase awareness of the NSP by distributing pamphlets or through word of mouth (see 5.4.2). I agree that this could be a useful step to take and pamphlets or advertising through word of mouth could be done when patients access community NSPs or the community SCSs.

Several patients, however, highlighted barriers to accepting supplies. These patients suggested the ARCH team create a physical and structural change, i.e. a micro-environmental intervention, at the RAH by constructing a safe place for them to inject (see 5.4.3) (Kerr et al., 2007, p. 38). This recommendation may have already been addressed by the opening of ARCH's SCS.

Patients also described a need for policies to be established that provided clear guidance to both patients and RAH staff regarding what responsibilities a patient has and what actions staff may

take regarding the NSP (see 5.4.1). However, given that RAH unit staff have authority over a patient's care, the ARCH team will not be able to establish policies independently, but could work with the hospital and AHS leadership to develop and implement such site-wide (or possibly even zone or organization-wide) policies.

Until these policies are in place, the ARCH team could address patients' concerns regarding accepting supplies from the NSP by describing to patients the different roles of the ARCH team and RAH staff. The ARCH team could also explain to patients that certain changes to their care plan might occur and that some RAH staff may interact with them differently or confiscate their supplies. The ARCH team could instruct patients to contact them if this occurs and the ARCH team could attempt to mediate between ARCH patients and RAH staff (the ARCH team has already begun to do this).

However, in my opinion, these changes to the NSP are insufficient for improving care for PWID at the RAH. At times patients suggested or implied changes to how RAH staff can improve their delivery of care to PWID. Patients felt these changes had the possibility of further improving their physical health and personal wellbeing. I review these additional recommendations below.

5.6.2 Expand the types of harm reduction interventions offered at the RAH

Patients described a need for a safe place to inject and this need may have already been addressed by the opening of the SCS. However, patient accounts of in-hospital drug trafficking and other drug-related activity, including diverting medication and injecting into vascular access devices, suggest that further harm reduction interventions may help improve their hospital outcomes (Kerr, Small, & Wood, 2005, p. 216). When patients visit the SCS, they could receive more detailed safer injection education (e.g. how to find and maintain veins) that could help reduce the need to inject into vascular access devices (Fast, Small, Wood, & Kerr, 2008, p. 3). But patients could also be

supervised injecting into these ports and be trained on how to maintain their cleanliness to reduce the risk of infection. The ARCH team has recently adopted these services as part of their SCS.

A further step would be to prescribe injectable opioid agonists (e.g. injectable hydromorphone or diacetylmorphine) to hospital patients who use opioids (Oviedo-Joekes et al., 2009, p. 782). This could help reduce instances where patients are 'cheeking' their pills in order to inject them surreptitiously or sell them to others. It may also reduce patients' need to purchase drugs to inject and thus discourage illegal drug trafficking on site.

5.6.3 Facilitate a culture change within the RAH

This study also highlighted the need for greater and more pervasive cultural change within the RAH. Several patients described the ARCH team as "colleagues" while RAH staff were often described as people who would "get [patients] into trouble". At times, RAH staff took actions which patients interpreted as the result of stigma due to their race or ethnicity, street-involved appearance, or history or current drug use. A few patients described overhearing staff talk about them in a negative manner, or staff placing blame on patients for the health repercussions of their drug use; others felt judged because they were Indigenous. These negative experiences translated to some patients developing a distrust in RAH staff. The inability for patients and some RAH staff to effectively communicate with one another became a barrier for patients to access the care they needed. That said, several patients also had neutral to positive views of the RAH or the care provided by its staff and a minority of patients also took issue with aspects of the care provided by the ARCH team.

As such, changes to the social forces within the RAH may be facilitated by initiating training for RAH staff on the experiences of hospitalized PWID and Indigenous patients (McNeil et al., 2015, p. 688). Patients I interviewed suggested the ARCH team hold "workshops" or "staff meetings" to promote greater awareness of the challenges they face achieving pain relief and the

realities of injecting drugs while hospitalized. It has been suggested that when healthcare staff acknowledge patients' subjective experiences of pain and withdrawal symptoms and prioritize risk reduction over drug abstinence, harms to hospitalized PWID may be reduced (McNeil et al., 2015, p. 688-89). I agree that this might be a beneficial step to take. All RAH staff must complete orientation prior to commencing work at the RAH and a brief training regarding the experiences of PWID and Indigenous patients could be integrated into the orientation, with a longer and more targeted training for nurses, physicians, and security guards who interact with patients to a greater degree.

Research suggests that cultural awareness training for healthcare staff regarding the experiences of Indigenous patients and other stigmatized populations can have limited influence if not done properly (Downing and Kowal, 2011, p. 11). However, means of communication and mutual understanding may be strengthened when one takes a 'cultural-safety approach' to these trainings. This requires the complex historical, social, and political forces that culminated in these populations experiencing reduced health to be recognized, and healthcare staff to reflect on their own beliefs and actions, but be empowered to be part of the solution (Downing and Kowal, 2011, p. 11-12, McNeil et al., 2015, p. 689; Pauly et al., 2015, p. 122-23).

5.6.4 Improve patients' understanding of how medication is delivered at the RAH

While increased cultural safety within the RAH may improve how stigmatized populations perceive aspects of care provided at the RAH, patient interviews highlighted patients' particular dissatisfaction of how their medications were dispensed. Patients exhibited noticeable negative emotion and described experiencing stress and frustration when nurses dispensed their medication late, when they experienced sudden and unexplained changes to the type or amount of their prescribed medication, or without explanation nurses crushed their medication into applesauce or checked their cheeks for hidden medication. Reasons for these negative perceptions varied,

however, patients typically felt that the underlying motivation behind these actions was discriminatory.

Interviews with staff on their perceptions of the NSP and their experiences providing care to patients who inject drugs are ongoing and the perspectives of staff are currently unknown. However, given the large volume of patients the RAH treats, it is plausible that at nurses may dispense medication late to all their patients at particular times. Also, nurses are obligated to ensure patients consume their medication properly at the time of dispensation, which may require visual confirmation that the medication was swallowed. Finally, it is possible that all patients treated at the RAH may experience sudden and unexplained changes to their medication regimes, and RAH staff may not have time to explain these changes to all patients or RAH staff may not realize that some ARCH patients may want an explanation regarding these changes.

Therefore, the ARCH team could improve how they communicate with patients regarding their medication regimes. While RAH physicians make the final decision regarding medication regimes, the ARCH team physicians and nurse practitioners are typically involved or are aware of most changes that occur. As such, the ARCH team could inform patients of any changes that occur and particularly explain why those changes were made. If this is not possible, the ARCH team could warn patients that sudden changes may occur and that if these changes bother them to contact a member of the ARCH team.

The ARCH team could also inform patients that medication diversion is not allowed and that nurses are obligated to ensure patients are not diverting. According to ARCH leadership, the act of checking patients' cheeks for diverted medication is standard procedure. However, the act of crushing medication into applesauce for patients who are otherwise physically able to swallow tablets, is not. Therefore, the ARCH team could inform patients that RAH nurses may check their cheeks, and emphasize that this procedure may not be consistently practiced by all RAH staff and

that the sudden initiation of checking their cheeks may be random and not purposeful. The ARCH team could also instruct patients to contact them if a nurse crushes their medication into applesauce so this practice can be stopped, if unwarranted.

5.7 Strengths and limitations

Drug use in hospitals is an understudied and largely hidden phenomenon. My study sheds light on this important issue. I captured rich data on the daily injection-related experiences and practices of hospitalized PWID, including substantive feedback on how the NSP and their hospital care could be improved.

This study complements qualitative studies by others, most notably Pauly (Pauly, 2008; Pauly et al., 2015) and McNeil (McNeil et al., 2014; McNeil et al., 2015) and their colleagues who have also conducted qualitative research on the hospital experiences of PWID. My study builds on this past research by providing rich detail on the perspectives and experiences of patients who injected while they were still hospitalized. Patients detailed where and with whom they injected and their motivations and experiences injecting. Patients also described how they purchased drugs or accessed drugs to inject, trade, or sell. This study, however, enriches the literature by providing the first explicit feedback from patients' regarding their interactions with an acute care NSP. Also, this study was strengthened by my numerous consultations with members of the ICHWP Community Advisory Group, many of whom had lived experience of injecting while hospitalized.

However, there are several limitations to this study. Patient-oriented research aims to deliver timely health interventions and focused ethnographies are time limited (Canadian Institutes of Health Research, 2011, iii, 1-2 Mayan, 2009, p. 39). I was not able to complete follow-up interviews with patients or attempt to build a deeper sense of trust through sustained interactions with them, for example. As such, some patients may not have been as forthcoming or detailed as they would

have been otherwise. Several patients described interactions with the ARCH team that often occurred several months to years prior and may have experienced recall bias. Also, I only approached patients who the ARCH team had recommended. Relying on the team for referrals may have biased the sample towards patients who have had positive experiences with the team. And while I asked the ARCH team to recommend patients who had refused to accept supplies, all patients that were offered supplies by the ARCH team and refused had ceased active drug use during their hospital stay. As such, I did not interview patients who had refused supplies but were continuing to inject with their own supplies. These patients may have had a unique perspective that I was not able to capture. Additionally, the interviews aiming to capture the perspectives of RAH staff of the NSP started much later than my interviews and are still on-going. Thus, I was not able to account for staff perspectives in the current study.

Also, the NSP has changed significantly since this study commenced. The ARCH team opened a 24/7 acute-care SCS that provides all hospitalized patients access to supervised injection by a trained nurse and sterile injection supplies. Currently, if a patient reports active drug use the ARCH team encourages that patient to inject at the SCS, however the patient can also access supplies and leave to inject elsewhere. As a result, the frequency of patients injecting in their rooms and other locations on hospital property may have been reduced. Also, patients now have personal safes in their rooms where they can store their drugs and injection equipment. It is possible that the risk of nurses finding supplies in patients' rooms has now been reduced and patients may feel less anxious keeping supplies and drugs with them. It is also possible that the opening of the SCS, which garnered significant attention by RAH staff, may have drawn attention to the experiences of PWID who are hospitalized at the RAH. Staff of the SCS now follow up with RAH staff after a patient visits the SCS. These steps may have changed how RAH staff interact with hospitalized PWID.

Also patients sometimes thought I was a member of the ARCH team. This may have impacted how they described the team to me.

Finally, I described and framed my results within the structures and culture of the RAH and the ARCH team. The RAH is a large and busy inner-city hospital and the ARCH team provides care for a large number of people who are street-involved and have complex health needs and severe substance-use disorders. As such, this study may not be reflective of the experiences of hospitalized PWID in rural areas or cities substantially different from Edmonton. Also, patients' perspectives of the NSP and experiences with care may be inextricably tied to the ARCH team and its PSW since only the ARCH team and particularly its PSW offer and dispense supplies (Goodson & Vassar, 2011, p. 4; Lincoln & Guba, 2011, p. 27).

Nevertheless, this study adds to the literature by providing rich data on the experiences of hospitalized PWID. It also provides guidance to the ARCH team how they can modify the NSP and how hospitals similar to the RAH who lack an SCS may be able to establish an acute care SCS.

5.8 Conclusion

This study was the first study completed on an NSP located within an acute care setting. PWID often continue to inject while hospitalized and can experience increased harm due to unsafe injection practices, poor pain and withdrawal symptom control, and stigma from hospital staff (Breitbart et al., 1997, p. 235; Buchman et al., 2016, p. 1397; McNeil et al., 2014, p. 60, 62; Pauly et al., 2015, p. 125; Rhodes, 2002, p. 88). It is important to understand ways to reduce the risks hospitalized PWID face and this study indicates that a harm reduction approach to care may provide some benefit.

I used focused ethnography to understand patients' perspectives of the NSP and their experiences of the RAH and RAH staff. I also used patient-oriented research guide my study and in

particular guide how I framed my results and discussion chapters. Given the structure of the NSP has changed considerably, any future studies of the distribution of supplies to patients at RAH should incorporate research on the impact of the SCS. ICHWP may want to conduct studies with patients who accessed supplies from the SCS but chose to inject elsewhere in the hospital. The ARCH SCS is the first in an acute care hospital in North America and further research on patients' perspectives on its implementation will be important to facilitate quality improvement and ensure no undue access barriers for patients who inject drugs.

References

Abdul-Quader, A. S., Feelemyer, J., Modi, S., Stein, E. S., Briceno, A., Semaan, S., … Jarlais, D. C. D. (2013). Effectiveness of Structural-Level Needle/Syringe Programs to Reduce HCV and HIV Infection Among People Who Inject Drugs: A Systematic Review. *AIDS and Behavior*, *17*(9), 2878–2892. https://doi.org/10.1007/s10461-013-0593-y

Alberta Government. (n.d.). Edmonton - % Aboriginal Population. Retrieved July 1, 2018, from https://regionaldashboard.alberta.ca/region/edmonton/percent-aboriginal-population/#/

Alberta Health Services. (2013). *Harm Reduction for Psychoactive Substance Use* (Health care and services No. HCS-33). Retrieved July 4, 2018, from https://extranet.ahsnet.ca/teams/policydocuments/1/clp-harm-reduction-for-psychoactive-substance-use-policy.pdf

Alberta Health Services. (2018b). *Supervised Consumption Services* (No. PS-97).

Alford, D. P. (2006). Acute Pain Management for Patients Receiving Maintenance Methadone or Buprenorphine Therapy. *Annals of Internal Medicine*, *144*(2), 1–14. https://doi.org/10.7326/0003-4819-144-2-200601170-00010

Barbour, R. S. (2001). Checklists for improving rigour in qualitative research: a case of the tail wagging the dog? *BMJ : British Medical Journal*, *322*(7294), 1115–1117. https://doi.org/10.1136/bmj.322.7294.1115

Berg, K. M., Arnsten, J. H., Sacajiu, G., & Karasz, A. (2009). Providers' Experiences Treating Chronic Pain Among Opioid-Dependent Drug Users. *Journal of General Internal Medicine*, *24*(4), 482–488. https://doi.org/10.1007/s11606-009-0908-x

Blair, E. (2015). A reflexive exploration of two qualitative data coding techniques. *Journal of Methods and Measurement in the Social Sciences*, *6*(1), 14–29. https://doi.org/10.2458/v6i1.18772

Boddy, C. R. (2016). Sample size for qualitative research. *Qualitative Market Research: An International Journal*, *19*(4), 426–432. https://doi.org/10.1108/QMR-06-2016-0053

Breitbart, W., Rosenfeld, B., Passik, S., Kaim, M., Funesti-esch, J., & Stein, K. (1997). A comparison of pain report and adequacy of analgesic therapy in ambulatory AIDS patients with and without a history of substance abuse. *Pain*, *72*(1), 235–243. https://doi.org/10.1016/S0304-3959(97)00039-0

Brener, L., Von Hippel, W., Kippax, S., & Preacher, K. J. (2010). The role of physician and nurse attitudes in the health care of injecting drug users. *Substance Use & Misuse*, *45*(7–8), 1007–1018. https://doi.org/10.3109/10826081003659543

Browne, A. J., Smye, V. L., Rodney, P., Tang, S. Y., Mussell, B., & O'Neil, J. (2011). Access to primary care from the perspective of Aboriginal patients at an urban emergency department. *Qualitative Health Research*, *21*(3), 333–348. https://doi.org/10.1177/1049732310385824

Buchman, D. Z., Ho, A., & Illes, J. (2016). You Present like a Drug Addict: Patient and Clinician Perspectives on Trust and Trustworthiness in Chronic Pain Management. *Pain Medicine*, *17*(8), 1394–1406. https://doi.org/10.1093/pm/pnv083

Canadian Institutes of Health Research. (2011). *Canada's Strategy for Patient-Oriented Research: Improving health outcomes through evidence-informed care*. Retrieved June 28, 2018 from, http://www.cihr-irsc.gc.ca/e/44000.html

Cleland, C., Deren, S., Fuller, C., Blaney, S., McMahon, J., Tortu, S., … Vlahov, D. (2007). Syringe disposal among injection drug users in Harlem and the Bronx during the New York State expanded syringe access demonstration program. *Health Education & Behavior*, *34*(2), 390–403. https://doi.org/10.1177/1090198106288560

Conover, S., Berkman, A., Gheith, A., Jahiel, R., Stanley, D., Geller, P. A., … Susser, E. (1997). Methods for successful follow-up of elusive urban populations: an ethnographic approach with homeless men. *Bulletin of the New York Academy of Medicine*, *74*(1), 90–108. PMID: 9211004

Cruz, E., & Higginbottom, G. M. (2013). The use of focused ethnography in nursing research. *Nurse Researcher*, *20*(4), 36–43. https://doi.org/10.7748/nr2013.03.20.4.36.e305

Csiernik, R., Rowe, W. S., & Watkin, Jim. (2017). Prevention as Controversy: Harm Reduction. In R. Csiernik & W. S. Rowe (Eds.), *Responding to the Oppression of Addiction: Canadian Social Work Perspectives*. (3rd ed., p. 28-43). Toronto, Canada: Canadian Scholars' Press.

Degenhardt, L., & Hall, W. (2012). Extent of illicit drug use and dependence, and their contribution to the global burden of disease. *The Lancet*, *379*(9810), 55–70. https://doi.org/10.1016/S0140-6736(11)61138-0

Degenhardt, L., Mathers, B., Vickerman, P., Rhodes, T., Latkin, C., & Hickman, M. (2010). Prevention of HIV infection for people who inject drugs: why individual, structural, and combination approaches are needed. *The Lancet*, *376*(9737), 285–301. https://doi.org/10.1016/S0140-6736(10)60742-8

Dietze, P., Stoové, M., Miller, P., Kinner, S., Bruno, R., Alati, R., & Burns, L. (2010). The self-reported personal wellbeing of a sample of Australian injecting drug users. *Addiction*, *105*(12), 2141–2148. https://doi.org/10.1111/j.1360-0443.2010.03090.x

Downing, R., & Kowal, E. (2011). A postcolonial analysis of Indigenous cultural awareness training for health workers. *Health Sociology Review*, *20*(1), 5–15. https://doi.org/10.5172/hesr.2011.20.1.5

Elo, S., Kääriäinen, M., Kanste, O., Pölkki, T., Utriainen, K., & Kyngäs, H. (2014). Qualitative Content Analysis: A Focus on Trustworthiness. *SAGE Open*, *4*(1), 2158244014522633. https://doi.org/10.1177/2158244014522633

Erlingsson, C., & Brysiewicz, P. (2017). A hands-on guide to doing content analysis. *African Journal of Emergency Medicine*, *7*(3), 93–99. https://doi.org/10.1016/j.afjem.2017.08.001

Fast, D., Small, W., Wood, E., & Kerr, T. (2008). The perspectives of injection drug users regarding safer injecting education delivered through a supervised injecting facility. *Harm Reduction Journal*, *5*(1), 32. https://doi.org/10.1186/1477-7517-5-32

Goodman, A., Fleming, K., Markwick, N., Morrison, T., Lagimodiere, L., & Kerr, T. (2017). "They treated me like crap and I know it was because I was Native": The healthcare experiences of Aboriginal peoples living in Vancouver's inner city. *Social Science & Medicine*, *178*, 87–94. https://doi.org/10.1016/j.socscimed.2017.01.053

Goodson, L., & Vassar, M. (2011). An overview of ethnography in healthcare and medical education research. *Journal of Educational Evaluation for Health Professions*, *8*(4). https://doi.org/10.3352/jeehp.2011.8.4

Graham, L. J., & Connelly, D. M. (2013). "Any Movement at All Is Exercise": A Focused Ethnography of Rural Community-Dwelling Older Adults' Perceptions and Experiences of Exercise as Self-Care. *Physiotherapy Canada*, *65*(4), 333–341. https://doi.org/10.3138/ptc.2012-31

Graneheim, U. H., & Lundman, B. (2004). Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today*, *24*(2), 105–112. https://doi.org/10.1016/j.nedt.2003.10.001

Grewal, H. K., Ti, L., Hayashi, K., Dobrer, S., Wood, E., & Kerr, T. (2015). Illicit drug use in acute care settings. *Drug and Alcohol Review*, *34*(5), 499–502. https://doi.org/10.1111/dar.12270

Guba, E.G., & Lincoln, Y.S. (1994). Competing paradigms in qualitative research. In N.K. Denzin & Y.S. Lincoln (Eds.), *Handbook of Qualitative Research (p. 105-117)*. London, United Kingdom: Sage.

Haber, P. S., Demirkol, A., Lange, K., & Murnion, B. (2009). Management of injecting drug users admitted to hospital. *The Lancet*, *374*(9697), 1284–1293. https://doi.org/10.1016/S0140-6736(09)61036-9

Hall, M. A., Zheng, B., Dugan, E., Camacho, F., Kidd, K. E., Mishra, A., & Balkrishnan, R. (2002). Measuring Patients' Trust in their Primary Care Providers. *Medical Care Research and Review*, *59*(3), 293–318. https://doi.org/10.1177/1077558702059003004

Hankins, C. A. (1998). Syringe Exchange in Canada: Good but Not Enough to Stem the HIV Tide. *Substance Use & Misuse*, *33*(5), 1129–1146. https://doi.org/10.3109/10826089809062211

Hawes, M. L., & Willegal, K. M. (2017). Responsible Compassionate Care: Meeting the Needs of Patients with a History of Intravenous Drug Abuse. *The Journal of the Association for Vascular Access*, *22*(1), 31–34. https://doi.org/10.1016/j.java.2016.08.004

Hawkins, J. D., & Fraser, M. W. (1985). Social networks of street drug users: a comparison of two theories. *Social Work Research and Abstracts*, *21*(1), 3–12. https://doi.org/10.1093/swra/21.1.3

Heimer, R. (1998). Can Syringe Exchange Serve as a Conduit to Substance Abuse Treatment? *Journal of Substance Abuse Treatment*, *15*(3), 183–191. https://doi.org/10.1016/S0740-5472(97)00220-1

Heller, D., McCoy, K., & Cunningham, C. (2004). An invisible barrier to integrating HIV primary care with harm reduction services: philosophical clashes between the harm reduction and medical models. *Public Health Reports*, *119*(1), 32–39. https://doi.org/10.1177/003335490411900109

Higginbottom, G. M., Pillay, J. J., & Boadu, N. Y. (2013). Guidance on performing focused ethnographies with an emphasis on healthcare research. *The Qualitative Report*, *18*(17), 1–16. https://doi.org/10.7939/R35M6287P

Ho, J., Archuleta, S., Sulaiman, Z., & Fisher, D. (2010). Safe and successful treatment of intravenous drug users with a peripherally inserted central catheter in an outpatient parenteral antibiotic treatment service. *Journal of Antimicrobial Chemotherapy*, *65*(12), 2641–2644. https://doi.org/10.1093/jac/dkq355

Hsieh, H.-F., & Shannon, S. E. (2005). Three Approaches to Qualitative Content Analysis. *Qualitative Health Research*, *15*(9), 1277–1288. https://doi.org/10.1177/1049732305276687

Huxtable, C. A., Roberts, L. J., Somogyi, A. A., & Macintyre, P. E. (2011). Acute pain management in opioid-tolerant patients: a growing challenge. *Anaesthesia & Intensive Care*, *39*(5), 804–823. PMID: 21970125

Hwang, S. W., Li, J., Gupta, R., Chien, V., & Martin, R. E. (2003). What happens to patients who leave hospital against medical advice? *Canadian Medical Association Journal*, *168*(4), 417–420. PMID: 12591781

Hyshka, E., Anderson, J., Wong, Z.-W., & Wild, T. C. (2016). *Risk behaviours and service needs of marginalized people who use drugs in Edmonton's inner City: Results from the Edmonton Drug Use and Health Survey* (pp. i–115). Edmonton, Alberta: University of Alberta.

Jones, L., Pickering, L., Sumnall, H., McVeigh, J., & Bellis, M. A. (2008). *A review of the effectiveness and cost-effectiveness of needle and syringe programmes for injecting drug users (Report)*. Liverpool, United Kingdom: Centre for Public Health, Liverpool John Moores University. Retrieved May 28, 2018 from https://www.nice.org.uk/guidance/ph18/documents/needle-and-syringe-programmes-review-of-effectiveness-and-cost-effectiveness-executive-summary2

Kerr, T., Wood, E., Grafstein, E., Ishida, T., Shannon, K., Lai, C., … Tyndall, M. W. (2004). High Rates of Primary Care and Emergency Department Use Among Injection Drug Users in Vancouver. *Journal of Public Health*, *27*(1), 62–66. https://doi.org/10.1093/pubmed/fdh189

Kerr, Thomas, Small, W., Moore, D., & Wood, E. (2007). A micro-environmental intervention to reduce the harms associated with drug-related overdose: evidence from the evaluation of

Vancouver's safer injection facility. *The International Journal on Drug Policy*, *18*(1), 37–45. https://doi.org/10.1016/j.drugpo.2006.12.008

Kerr, Thomas, Small, W., & Wood, E. (2005). The public health and social impacts of drug market enforcement: A review of the evidence. *International Journal of Drug Policy*, *16*(4), 210–220. https://doi.org/10.1016/j.drugpo.2005.04.005

Knoblauch, H. (2005). Focused Ethnography. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research*, *6*(3). https://doi.org/10.17169/fqs-6.3.20

Krüsi, A., Small, W., Wood, E., & Kerr, T. (2009). An integrated supervised injecting program within a care facility for HIV-positive individuals: a qualitative evaluation. *AIDS Care*, *21*(5), 638–644. https://doi.org/10.1080/09540120802385645

LeCompte, M. D., & Schensul, J. J. (2010). *Designing and Conducting Ethnographic Research* (2nd ed.). Plymouth, United Kingdom: Altamira Press.

Lenton, S., & Single, E. (1998). The definition of harm reduction. *Drug and Alcohol Review*, *17*(2), 213–220. https://doi.org/10.1080/09595239800187011

Lincoln, Y. S., & Guba, E. G. (2009). The Only Generalization Is: There Is No Generalization. In R. Gomm, M. Hammersley, & P. Foster, *Case Study Method* (pp. 27–44). 1 Oliver's Yard, 55 City Road, London England EC1Y 1SP United Kingdom: SAGE Publications Ltd. https://doi.org/10.4135/9780857024367.d6

Lovi, R., & Barr, J. (2009). Stigma reported by nurses related to those experiencing drug and alcohol dependency: a phenomenological Giorgi study. *Contemporary Nurse*, *33*(2), 166–178. https://doi.org/10.5172/conu.2009.33.2.166

Macneil, J., & Pauly, B. (2011). Needle exchange as a safe haven in an unsafe world. *Drug and Alcohol Review*, *30*(1), 26–32. https://doi.org/10.1111/j.1465-3362.2010.00188.x

MacPhail, C., Khoza, N., Abler, L., & Ranganathan, M. (2016). Process guidelines for establishing Intercoder Reliability in qualitative studies. *Qualitative Research*, *16*(2), 198–212. https://doi.org/10.1177/1468794115577012

Mallon, W. K. (2001). Is it acceptable to discharge a heroin user with an intravenous line to complete his antibiotic therapy for cellulitis at home under a nurse's supervision? *Western Journal of Medicine*, *174*(3), 157. PMID: 11238332

Martin, D., Miller, A. P., Quesnel-Vallée, A., Caron, N. R., Vissandjée, B., & Marchildon, G. P. (2018). Canada's universal health-care system: achieving its potential. *The Lancet*, *391*(10131), 1718–1735. https://doi.org/10.1016/S0140-6736(18)30181-8

Masson, C. L., Sorensen, J. L., Grossman, N., Sporer, K. A., Des Jarlais, D. C., & Perlman, D. C. (2010). Organizational Issues in the Implementation of a Hospital-Based Syringe Exchange Program. *Substance Use & Misuse*, *45*(6), 901–915. https://doi.org/10.3109/10826080903080631

Masson CL, Sorensen JL, Perlman DC, Shopshire MS, Delucchi KL, Chen T, … Hall SM. (2007). Hospital- versus community-based syringe exchange: a randomized controlled trial. *AIDS Education & Prevention*, *19*(2), 97–110. https://doi.org/10.1521/aeap.2007.19.2.97

Mathers, B. M., Degenhardt, L., Phillips, B., Wiessing, L., Hickman, M., Strathdee, S. A., … Mattick, R. P. (2008). Global epidemiology of injecting drug use and HIV among people who inject drugs: a systematic review. *The Lancet*, *372*(9651), 1733–1745. https://doi.org/10.1016/S0140-6736(08)61311-2

Mayan, M. J. (2009). *Essentials of Qualitative Inquiry*. Walnut Creek, United States: Left Coast Press.

McNeil, R., Kerr, T., Pauly, B., Wood, E., & Small, W. (2015). Advancing patient-centered care for structurally vulnerable drug-using populations: a qualitative study of the perspectives of people who use drugs regarding the potential integration of harm reduction interventions into hospitals. *Addiction*, *111*, 685–694. https://doi.org/10.1111/add.13214

McNeil, R., Small, W., Wood, E., & Kerr, T. (2014). Hospitals as a 'risk environment': An ethno-epidemiological study of voluntary and involuntary discharge from hospital against medical advice among people who inject drugs. *Social Science & Medicine*, *105*, 59–66. https://doi.org/10.1016/j.socscimed.2014.01.010

Merrill, J. O., Rhodes, L. A., Deyo, R. A., Marlatt, G. A., & Bradley, K. A. (2002). Mutual mistrust in the medical care of drug users. *Journal of General Internal Medicine*, *17*(5), 327–333. https://doi.org/10.1007/s11606-002-0034-5

Miles, M. B., & Huberman, A. M. (1994). *Qualitative Data Analysis: An Expanded Sourcebook* (2nd ed.). Thousand Oaks, United States: SAGE Publications.

Miller, N., Sheppard, L., Colenda, C., & Magen, J. (2001). Why Physicians Are Unprepared to Treat Patients Who Have Alcohol and Drug-related Disorders. *Academic Medicine*, *76*(5), 410–418. PMID: 11346513

Moore, D., & Dietze, P. (2005). Enabling environments and the reduction of drug-related harm: re-framing Australian policy and practice. *Drug and Alcohol Review*, *24*(3), 275–284. https://doi.org/10.1080/09595230500170258

Morgan, B. (2014). Nursing Attitudes Toward Patients with Substance Use Disorders in Pain, *15*(1), 165–175. https://doi.org/10.1016/j.pmn.2012.08.004

Morse, J. M. (2015). Critical Analysis of Strategies for Determining Rigor in Qualitative Inquiry. *Qualitative Health Research*, *25*(9), 1212–1222. https://doi.org/10.1177/1049732315588501

Mull, D. S., Agran, P. F., Winn, D. G., & Anderson, C. L. (2001). Injury in children of low-income Mexican, Mexican American, and non-Hispanic white mothers in the USA: a focused ethnography. *Social Science & Medicine (1982)*, *52*(7), 1081–1091. https://doi.org/10.1016/S0277-9536(00)00215-X

Neale, J., Tompkins, C., & Sheard, L. (2008). Barriers to accessing generic health and social care services: a qualitative study of injecting drug users. *Health & Social Care in the Community*, *16*(2), 147–154. https://doi.org/10.1111/j.1365-2524.2007.00739.x

Nightingale, R., Sinha, M. D., & Swallow, V. (2014). Using focused ethnography in paediatric settings to explore professionals' and parents' attitudes towards expertise in managing chronic kidney disease stage 3-5. *BMC Health Services Research*, *14*, 403. https://doi.org/10.1186/1472-6963-14-403

Olson, K. (2016). *Essentials of Qualitative Interviewing*. New York, NY: Routledge.

O'Reilly, M., & Parker, N. (2013). 'Unsatisfactory Saturation': a critical exploration of the notion of saturated sample sizes in qualitative research. *Qualitative Research*, *13*(2), 190–197. https://doi.org/10.1177/1468794112446106

Oviedo-Joekes, E., Brissette, S., Marsh, D. C., Lauzon, P., Guh, D., Anis, A., & Schechter, M. T. (2009). Diacetylmorphine versus Methadone for the Treatment of Opioid Addiction. *New England Journal of Medicine*, *361*(8), 777–786. https://doi.org/10.1056/NEJMoa0810635

Palepu, A., Tyndall, M. W., Leon, H., Muller, J., O'Shaughnessy, M. V., Schechter, M. T., & Anis, A. H. (2001). Hospital utilization and costs in a cohort of injection drug users. *CMAJ: Canadian Medical Association Journal = Journal de l'Association Medicale Canadienne*, *165*(4), 415–420. PMID: 11531049

Pauly, B. (Bernie). (2008). Shifting moral values to enhance access to health care: Harm reduction as a context for ethical nursing practice. *International Journal of Drug Policy*, *19*(3), 195–204. https://doi.org/10.1016/j.drugpo.2008.02.009

Pauly, B., McCall, J., Browne, A. J., Parker, J., & Mollison, A. (2015). Toward Cultural Safety: Nurse and Patient Perceptions of Illicit Substance Use in a Hospitalized Setting. *Advances in Nursing Science*, *38*(2), 121–135. https://doi.org/10.1097/ANS.0000000000000070

Potier, C., Laprévote, V., Dubois-Arber, F., Cottencin, O., & Rolland, B. (2014a). Supervised injection services: What has been demonstrated? A systematic literature review. *Drug & Alcohol Dependence*, *145*, 48–68. https://doi.org/10.1016/j.drugalcdep.2014.10.012

Potier, C., Laprévote, V., Dubois-Arber, F., Cottencin, O., & Rolland, B. (2014b). Supervised injection services: What has been demonstrated? A systematic literature review. *Drug and Alcohol Dependence*, *145*, 48–68. https://doi.org/10.1016/j.drugalcdep.2014.10.012

Rachlis, B. S., Kerr, T., Montaner, J. S., & Wood, E. (2009). Harm reduction in hospitals: is it time? *Harm Reduction Journal*, *6*(1), 19. https://doi.org/10.1186/1477-7517-6-19

Rashid, M., Caine, V., & Goez, H. (2015). The Encounters and Challenges of Ethnography as a Methodology in Health Research. *International Journal of Qualitative Methods*, *14*(5). https://doi.org/10.1177/1609406915621421

Rhodes, T. (2002). The 'risk environment': a framework for understanding and reducing drug-related harm. *International Journal of Drug Policy*, *13*(2), 85–94. https://doi.org/10.1016/S0955-3959(02)00007-5

Richards, L., & Morse, J. M. (2007). *Readme First for a User's Guide to Qualitative Methods*. Thousand Oaks, United States: Sage Publications.

Ritchie, J., & Lewis, J. (2003). *Qualitative Research Practice: A Guide for Social Science Students and Researchers*. London, England: SAGE.

Royal Alexandra Hospital Foundation. (2016). The Royal Alex - Essential to Alberta and Important to Canada. Retrieved May 23, 2018, from https://www.royalalex.org/news/royal-alex-essential-alberta-and-important-canada/

Royal Alexandra Hospital Foundation. (2018a). About the Royal Alexandra Hospital. Retrieved May 23, 2018, from https://www.royalalex.org/causes/royal-alexandra-hospital/about-royal-alexandra-hospital/

Rubin, H. J., & Rubin, I. S. (1995). *Qualitative Interviewing: The Art of Hearing Data*. Thousand Oaks, United States: SAGE Publications.

Sacristán, J. A. (2013). Patient-centered medicine and patient-oriented research: improving health outcomes for individual patients. *BMC Medical Informatics and Decision Making*, *13*(1), 6. https://doi.org/10.1186/1472-6947-13-6

Salvallagio, G., Dong, K., Hyshka, E., & Nixon, L. (2016). Enhanced Multidisciplinary Care for Inner City Patients with High Acute Care Use: Study Protocol. *Canadian Journal of Addiction*, 7(3), 34-41. ISSN: 1932-0620

Savin-Paden, M., & Major, C.H. (2012). *Qualitative Research: The Essential Guide to Theory and Practice.* London, United Kingdom: Routledge.

Sinha, R. (2008). Chronic Stress, Drug Use, and Vulnerability to Addiction. *Ann N Y Acad Sci.* 1141, 105–130. https://doi.org/10.1196/annals.1441.030

Stewart, M. (2001). Towards a global definition of patient centred care: The patient should be the judge of patient centred care. *BMJ*, *322*(7284), 444–445. https://doi.org/10.1136/bmj.322.7284.444

Stokes, B. (2014). Operational Directive: Provision of Sterile Needles and Syringes from Rural and Regional Hospitals to People Who Inject Drugs. *Government of Western Australia Department of Health.* OD#: 0553/14, File#: F-AA-00216. Retrieved May 2, 2018, from http://health.wa.gov.au/circularsnew/pdfs/13140.pdf

Stone, K. (2016). *The Global State of Harm Reduction 2016*. ISBN: 978-0-9935434-3-2

Strike, C., Guta, A., de Prinse, K., Switzer, S., & Chan Carusone, S. (2014). Living with addiction: The perspectives of drug using and non-using individuals about sharing space in a hospital

setting. *International Journal of Drug Policy*, *25*(3), 640–649. https://doi.org/10.1016/j.drugpo.2014.02.012

Strike, Carol, Leonard, L., Millson, M., Anstice, S., Berkeley, N., & Medd, E. (2006). *Ontario Needle Exchange Programs: Best Practice Recommendations*. Retrieved May 15, 2018 from, http://www.ohrdp.ca/wp-content/uploads/pdf/Best_Practices_Report.pdf

Suh, T., Mandell, W., Latkin, C., & Kim, J. (1997). Social network characteristics and injecting HIV-risk behaviors among street injection drug users. *Drug and Alcohol Dependence*, *47*(2), 137–143. PMID: 9298335

Szott, K. (2014). Remaking hospital space: the health care practices of injection drug users in New York City. *The International Journal on Drug Policy*, *25*(3), 650–652. https://doi.org/10.1016/j.drugpo.2013.12.010

Tang, S. Y., & Browne, A. J. (2008). "Race" matters: racialization and egalitarian discourses involving Aboriginal people in the Canadian health care context. *Ethnicity & Health*, *13*(2), 109–127. https://doi.org/10.1080/13557850701830307

Ti, L., Buxton, J., Harrison, S., Dobrer, S., Montaner, J., Wood, E., & Kerr, T. (2015). Willingness to access an in-hospital supervised injection facility among hospitalized people who use illicit drugs. *Journal of Hospital Medicine*, *10*(5), 301–306. https://doi.org/10.1002/jhm.2344

Ti, L., Milloy, M.-J., Buxton, J., McNeil, R., Dobrer, S., Hayashi, K., … Kerr, T. (2015). Factors Associated with Leaving Hospital against Medical Advice among People Who Use Illicit Drugs in Vancouver, Canada. *PLOS ONE*, *10*(10), e0141594. https://doi.org/10.1371/journal.pone.0141594

Treloar, C., Rance, J., Yates, K., & Mao, L. (2016). Trust and people who inject drugs: The perspectives of clients and staff of Needle Syringe Programs. *International Journal of Drug Policy*, *27*, 138–145. https://doi.org/10.1016/j.drugpo.2015.08.018

Van Boekel, L. C., Brouwers, E. P. M., van Weeghel, J., & Garretsen, H. F. L. (2013). Stigma among health professionals towards patients with substance use disorders and its consequences for healthcare delivery: systematic review. *Drug and Alcohol Dependence*, *131*(1–2), 23–35. https://doi.org/10.1016/j.drugalcdep.2013.02.018

Van Den Hoonaard, W., & Van Den Hoonaard, D. (2013). *Essentials of Thinking Ethically in Qualitative Research*. Walnut Creek, United States: Routledge.

Vlahov, D., Robertson, A. M., & Strathdee, S. A. (2010). Prevention of HIV Infection among Injection Drug Users in Resource-Limited Settings. *Clinical Infectious Diseases*, *50*(Supplement_3), S114–S121. https://doi.org/10.1086/651482

Volkow, N. D., & McLellan, A. T. (2016). Opioid Abuse in Chronic Pain — Misconceptions and Mitigation Strategies. *New England Journal of Medicine*, *374*(13), 1253–1263. https://doi.org/10.1056/NEJMra1507771

Wall, S. (2015). Focused Ethnography: A Methodological Adaptation for Social Research in Emerging Contexts. 16(1), 15. http://dx.doi.org/10.17169/fqs-16.1.2182

Wexner Medical Center – Ohio State University. (n.d.). Inpatient Management of Potential Opioid Abuse and Diversion, 5. Retrieved on May 22, 2018, from https://evidencebasedpractice.osumc.edu/Documents/Guidelines/AbberantDrugBehaviors.pdf

Wood, E., Tyndall, M. W., Spittal, P. M., Li, K., Kerr, T., Hogg, R. S., … Schechter, M. T. (2001). Unsafe injection practices in a cohort of injection drug users in Vancouver: could safer injecting rooms help? *CMAJ: Canadian Medical Association Journal = Journal de l'Association Medicale Canadienne*, *165*(4), 405–410. PMID: 11531048

World Health Organization. (2012). *WHO, UNODC, UNAIDS technical guide for countries to set targets for universal access to HIV prevention, treatment and care for injecting drug users.* Retrieved on May 2, 2018, from http://www.who.int/hiv/pub/idu/targets_universal_access/en/

Appendix 1.0 Semi-structured interview guide

Hello, I just wanted to start by telling you a bit about myself. My name is Hannah and I'm a student in public health at the U of A. I work with a program called the ARCH program here at the Royal Alex. We try and help people who use alcohol and/or drugs and improve their experience at the hospital. We also have a needle exchange program. Basically anyone from the ARCH program can give clean rigs and other supplies to ARCH patients. So I'm here to understand a bit more about this program. That's pretty much what the interview will be about. I will ask you questions and you can answer however you like. Again everything you say to me is confidential and if you want to skip a question, just let me know. You may also stop the interview at any time. (Get to know the patient a bit) First of all, I wanted to start by asking you a bit about your experience here at the Royal Alex.

[TURN ON AUDIO RECORDER]

Topic Area I: ARCH Team Syringe Exchange Program [SEP]

Questions:	**Possible probes:**
-What brought you to the hospital? -When were you admitted?	
- What do you think about the care you have received so far for [condition]?	- Specific examples/incidents (positive and negative) - Pain/withdrawal management
-How do you feel the staff have treated you?	- Do you feel like the doctors and nurses listen to what you say? -What do you think of the Royal Alex? -What do you think about the doctors/nurses? -What do you think about the ARCH team?
Is it okay if I ask, how comfortable do you feel talking to doctors or nurses about injecting drugs? - What about talking to the ARCH team?	- Why comfortable or not comfortable? - Who did you talk to from the ARCH team?
Have you heard of ARCH's needle exchange program? (Or ask a confirmatory question in response to their answer to your questions from the introduction)	-If so, who told you about it? -What have you heard about it?
What do you think about the Royal Alex having a needle exchange program?	-Does the needle exchange program change your perspective of the Royal Alex?
Have you used the needle exchange program?	***If answer was yes, please go to section 2. If answer was no, please go to section 3.***

[SKIP TO SECTION TOPIC AREA III IF PATIENT DID NOT ACCESS SEP]

Topic Area II: Experiences accessing the SEP [SKIP IF PATIENT DIDN'T ACCESS THE SEP]

Questions:	**Possible probes:**
Can you tell me about your experience the last time you used it [RAH needle exchange program]?	-How did it go? -How were you feeling at the time? (probes: withdrawal, pain, or stress) -Do you remember who offered you supplies? -Did you feel comfortable or uncomfortable talking about the needle exchange program with [name of ARCH staff member who offered supplies]? -Were there other people in the room? How did you feel talking about the program in front of them? -Did you feel comfortable or uncomfortable using the needle exchange program? *-How safe did you feel while using the program?* *-Were you able to let your guard down?* -Did you experience stigma or judgement from anyone while using the program? -Were you worried about getting in trouble at all? -Did you have supplies taken from you by anyone? -Anything else?

What do you like about the needle exchange program? What do you not like? Is it okay if I ask…	-Specific examples/incidents -When you're in hospital, where do you inject? -Have you ever overdosed in the hospital? -Do you generally inject alone or do you inject with friends? -How do you access drugs? -Has anyone ever thought you were injecting your meds? Or have they checked you for cheeking your meds? -(If applicable) Have you been offered methadone or suboxone?
How often do you use the needle exchange program when you're hospitalized? Do you ever get supplies from somewhere else while in the hospital? If so, from who and how often?	-Why frequently or not frequently? -Other hospital staff, AAWEAR, Streetworks van, friends or family members? -If you get supplies somewhere else, how was that experience different from ARCH's needle exchange program?
Do you think being asked about supplies is a trigger to wanting to use?	-If so, is there any way we can avoid these kinds of triggers?
Sometimes people tell us that they injected in their PICC line, have you ever done this?	-Do you mind if I ask you why or why not?
How do you think the hospital's needle exchange program has affected you?	-In terms of your health? - In terms of the medical treatment you are receiving? -Reusing or sharing rigs? -Are you more or less willing to stay in hospital and complete your treatment?
Has using the needle exchange program changed your experience here at the Royal Alex?	-Positives: feeling better, willing to stay longer and complete treatment, fewer worries, etc. -Negatives: feeling judged, not wanting to use, less likely to stay, worries, etc. -Comparisons to prior hospitalizations?
Has the needle exchange program changed how you get along with the	- Specific examples/incidents (positive and negative) -More or less trust?

staff here?	-More or less open? -Feeling like you have more or less control over your care? -Beliefs about underlying reasons for good or bad care
How can we make the hospital experience better for people who inject drugs?	-What would you do if you were in charge? -Syringe exchange improvements? -Other improvements? [staff, space, facility, etc. related] -Other ideas for reducing risk or harm?
The ARCH team is thinking of creating a pamphlet that we could give to patients. This pamphlet would explain what ARCH is and maybe even inform patients about the needle exchange program.	-Do you think this pamphlet is a good idea? -Would patients read it? -What should be in the pamphlet? -What shouldn't be in the pamphlet?
Would you access a supervised consumption service here at the Royal Alex if one became available?	-If yes: If you could imagine a supervised consumption service here at the Royal Alex, what would it look like? -If no: Why not? -Possible positives or negatives of this hospital-based service -If a patient overdoses while at the site should the nurses helping them be held responsible?
Is there anything else you would like to tell me?	
I just have a few demographic questions for you. We ask everyone these questions to help us understand different people's experiences.	-How old are you? -[Gender?] -May I ask your ethnicity? -What was the main issue that brought you to the hospital? -About how long have you been injecting drugs for?

[END INTERVIEW HERE IF PATIENT ACCESSED SYRINGE EXCHANGE PROGRAM]

Topic Area III: Reasons for not accessing the SEP [SKIP IF PATIENT ACCESSED SEP]

Questions:	**Possible probes:**
If the answer was no to the last question in the first section, please ask the following question. -Why do you think some patients choose not to use the needle exchange program?	- Do you remember who offered you supplies? -When [name of ARCH staff member who offered supplies] offered you supplies, were you experiencing withdrawal, pain, or psychological stress? -Did you feel comfortable or uncomfortable talking about the program with [name of ARCH staff member who offered supplies]? -Were there other people in the room? How did you feel talking about the program in front of them? -Did you experience stigma or judgement from anyone while you were hospitalized? -Were you worried about informal or formal sanctions? -Practical reasons? (brought own supplies, nothing too inject, etc.) -Clinical reasons? (being too sick, having pain managed well, etc.) -Wanting to stop injection drug use? (motivators?)
If you didn't use the needle exchange program, what did you do instead? Have you ever injected in hospital?	- Able to use clean rigs each time or had to reuse rigs? - Difficulty in getting rid of supplies? Where did you throw away your rigs? - Do you get supplies from visitors (AAWEAR, Streetworks van, friends or family members) while at RAH? If yes, how was that experience different from ARCH's needle exchange program? -Where do you normally inject? -Do you generally inject alone or do you inject with friends?
What do you think we can do to make the needle exchange program better or easier to use?	-Specific examples -Probe for rationale behind suggestions
What are some other ways to make hospital care for people who inject drugs better?	-What would you do if you were in charge? -Needle exchange improvements? -Other improvements? [staff, space, facility, etc. related] -Other ideas for reducing risks or harm?
Do you think being asked about supplies is a trigger to wanting to use?	-If so, is there any way we can avoid these kinds of triggers?

Sometimes people tell us that they injected in their PICC line, have you ever done this?	-Do you mind if I ask you why or why not?
The ARCH team is thinking of creating a pamphlet that we could give to patients. This pamphlet would explain what ARCH is and maybe even inform patients about the needle exchange program.	-Do you think this pamphlet is a good idea? -Would patients read it? -What should be in the pamphlet? -What shouldn't be in the pamphlet?
Would you access a supervised consumption service here at the Royal Alex if became available?	-If yes: If you could imagine a supervised consumption service here at the Royal Alex, what would it look like? -If no: Why not? -Possible positives or negatives of this hospital-based service
Is there anything else you would like to tell me?	
I just have a few demographic questions for you. We ask everyone these questions to help us understand different people's experiences.	-How old are you? -[Gender?] -May I ask your ethnicity? -Confirm main issue that brought you to the hospital? -About how long have you been injecting drugs for?

Appendix 2.0 Slang dictionary

Terminology	Variant	Definition
backload (verb)		to draw up all of a drug into one syringe and squirt the drug into another syringe through the back end where the plunger is
bang (verb)	mainline, slam	to inject a drug
barrel (noun)		a syringe
baseline (verb)		to abstain from drug use all together, or a particular type of drug, in order to start again and experience the original high
bead (noun)		the pill form of drug, often hidden in one's mouth for a certain period of time in order to inject later
bump (noun)		a small line of drug to snort
cheek (verb)		to hide a pill in one's mouth so one can inject or snort the pill later
come down (verb)		to experience withdrawal
cooker (noun)		a container used to mix and heat a drug
cotton fever (noun)	cotton pure	infection that originates from an endotoxin released by a bacteria which colonizes cotton plants, not from the cotton itself
crack hoot (noun)		an enjoyable experience on crack
crunch (noun)		high from a drug
dilly (noun)		the drug Dilaudid (Hydromorphone)
dime out (verb)		to inform on somebody
dope (noun)		often means heroin, but could mean any drug
down (noun)		any drug that has a depressant effect, typically opioids or opiates
eat (verb)		to take a drug orally
eight ball (noun)		a quantity of cocaine or meth that weighs an eighth of an ounce, equivalent to 3.5 grams.
flag (verb)		to pull back on the syringe until blood rushes into the syringe
flush (verb)	jacking, back blood, booting, kicking	to bring back blood into the syringe to gather any left-over drug and then inject again

frontload (verb)		to draw up all of a drug into one syringe and squirt the drug into another syringe through the front end where the needle typically is
gabbies (noun)		Gabapentin
grind (noun and verb)		to be in a time period (or the time period itself) where one attempts to stay away from drugs
homie g (noun)		fellow street involved people, literally means "friend gangster"
hustle (verb)	grind	to make money, in general through illegal means, often selling drugs, to access drugs. Could also be used to describe the pursuit of drugs.
jones (verb)		to crave or have an urge, particularly for a drug
keep six (verb)		to keep watch for police officers or other people in authority
line (noun)		a line of drugs to snort
nod (verb)	nodding out, on the nod	to doze off when high on opiates
pack (noun)		someone says a number before the word 'pack', and that is how many millimetres they are injecting according to the syringe. It is before adding water.
parachute (verb)		to roll powdered or crushed drugs in a piece of tissue paper and swallow it
pint (noun)		another word for meth
plug (verb)		insert a drug into anus
rig (noun)		needle and syringe
shard (noun)		a piece of meth, often considered purer than buying meth already ground up into powder
tie (noun)		tourniquet
tip (noun)		needle that you insert into a barrel
two-six (noun)		a term for a 26-ounce bottle of alcohol.
tweak (verb)		to act erratically after consuming drugs, typically meth
upper (noun)		any stimulant drug
wash (noun)		a small amount of drug leftover after mainlining
water (noun)		sterile water used to dissolve a drug

Appendix 3.0 Codebook

Category (n=8)	Sub-category (n=23)	Code (n=228)	Code description
3.2 Sample characteristics	Participants' personal and health history and current status	BI: DU affected personal life/family/friends	Patient describes a situation or in general where their injection drug use has affected their personal lives/family/friends.
		BI: Personal history/info	Patient provides personal history/ information.
		BI: Previous physical trauma/medical history	Patient describes experiencing previous physical trauma and/or their medical history.
		BI: PT chronic pain	Patient describes regularly experiencing pain.
		BI: PT has personal support network	Patient describes having a personal support network.
		BI: PT mental health/emotional distress	Patient describes experiencing mental health or emotional distress.
		BI: Reason PT came/remain RAH	Reason patient came or is staying at the RAH and length of time.
		BI: Socioeconomic struggles/unstably housed	Patient describes having socioeconomic or financial struggles in general.
		GE: PWID mistrust in general	People who inject drugs experience a general mistrust in society in general.
		GE: CO - Race/eth - Others towards PT	Patient describes experiencing racism in the community.
		GE: Cops - Negative interactions	Patient describes experiencing negative interactions with police officers in the community.
	Participants' drug use history and current status	DU: CO - General	Patient describes drug use in the community in general.
		DU: CO - Unsafe injection practices	Patient describes participating in unsafe injection practices in the community.
		DU: RAH/OHF/CO - Drug type - Down - General	Patient describes a situation involving down, in general.
		DU: RAH/OHF/CO - Drug type - Fentanyl/Carfentanil - General	Patient describes fentanyl or carfentanil in general.
		DU: RAH/OHF/CO - Drug type - Stimulant - General	Patient describes a situation involving a stimulant, in general.
		DU: RAH/OHF/CO - Drug type - Unknown injectable/non-injectable	Patient describes an experience with an unknown injectable/non-injectable drug type.
		DU: RAH/OHF/CO - Motivation DU - Curious/Enjoyment	Patient describes using drugs out of curiosity or enjoyment.

		DU: RAH/OHF/CO - Motivation DU - Habit/addiction	Patient describes using drugs due to their habit or addiction.
		DU: RAH/OHF/CO - Motivation DU - Injecting allows drug to last longer	Patient describes motivations for injecting, specifically that injecting allows the drug to last longer.
		DU: RAH/OHF/CO - Motivation DU - Pain	Patient describes injecting because of being in pain.
		DU: RAH/OHF/CO - Motivation DU - Prescription	The patient describes developing an addiction to a substance after the doctor prescribed that substance to the patient.
		DU: RAH/OHF/CO - Motivation DU - Withdrawal	Patient describes injecting in the hospital because of withdrawal symptoms.
		DU: RAH/OHF/CO - Motivation quit DU - Desire to be normal	The patient wants to quit using drugs in order to be 'normal'.
		DU: RAH/OHF/CO - Motivation quit DU - Difficulty	Patient describes difficulty quitting drug use.
		DU: RAH/OHF/CO - Motivation quit DU - Family/Support system	Patient describes wanting to quit drug use specifically in part due to their family/support system.
		DU: RAH/OHF/CO - Motivation quit DU - General	Patient describes quitting or reducing their drug use in general, for no specific reason.
		DU: RAH/OHF/CO - Motivation quit DU - Health/wellbeing	Patient describes wanting to stop injecting to increase health and wellbeing.
		DU: RAH/OHF/CO - Overdose exp/wit/poss	Patient describes an experience where they had a near fatal overdose or they witnessed someone having a near fatal overdose or fatal overdose.
		DU: RAH/OHF/CO - Prosocial behaviour	Patient describes a situation involving drug use and prosocial behaviour.
		DU: RAH/OHF/CO - Unsafe inject - Doctoring/Dependency	Patient describes paying someone to inject themselves or injecting other people for other services, aka doctoring.
		DU: RAH/OHF/CO - Unsafe inject - General	Patient describes unsafe injecting practices in general.
		DU: RAH/OHF/CO - Unsafe inject - Infections/abscesses/ID	Patient discusses infections or abscesses as a result of their injection drug use.
		DU: RAH/OHF/CO - Unsafe inject - Inject alone	Patient describes unsafe injecting practices, specifically that people are injecting alone.
		DU: RAH/OHF/CO - Unsafe inject - Lack of supports/place/knowledge	Patient describes a lack of supportive places to inject or knowledge regarding injecting.
		DU: RAH/OHF/CO - Unsafe inject - Used syringes	Patient describes the use of used syringes.

3.3/3.4 Patients' impressions and experiences with RAH staff	Participants' positive perceptions and experiences of the RAH	RAH: Care - Pos - General	Patient describes a positive view of the way the RAH staff in general treat patients.
		RAH: Care - Pos - HR approach to care	Patient describes the RAH staff as practicing a harm reduction approach to care.
		RAH: Care - Pos - Staff are professional	Patient describes a positive view of the way the RAH staff treat patients, in particular how they treat patient who inject drugs professionally, just like everyone else.
		RAH: Care - Pos - Staff attentive to PTs needs	Patient describes RAH staff as attentive to the needs of patients.
		RAH: Care - Pos - Staff judge PT DU - General - No	Patient states that the RAH staff, in general, do not exhibit biases towards people who inject drugs.
		RAH: Care - PT control over care - Yes/Sometimes	Patient feels that they have control of their care.
		RAH: Comfortable discuss IDU - Yes	Patient describes feeling comfortable talking to healthcare providers or staff about injecting drugs.
		RAH: Cops/security guards - Pos interactions - General	Patient describes having positive interactions with cops/security guards at the RAH.
		RAH: PT HP communicate well - Yes	Patient describes being able to communicate with the RAH staff.
		RAH: Treatment (medical) - Pos/Mix	Patient describes having positive medical treatment at the RAH.
		RAH: Trust staff - Yes	Patient describes trusting the RAH staff.
	Participants' negative perceptions and experiences of the RAH	RAH: Care - Neg - Regular busy inner-city hospital occurrences	Patient describes experiencing regular busy hospital occurrences.
		RAH: Care - Neg - Care ED worse than other care	Patient describes the care provided at the ED as worse than other care at the hospital.
		RAH: Care - Neg - Care from nurses worse than doctors	Patient describes treatment from the nurses at the RAH as worse than the treatment received from doctors at the hospital.
		RAH: Care - Neg - Each unit/staff member has unique culture regarding DU	Patient states that each unit and/or staff member at the RAH has their own unique culture regarding DU.
		RAH: Care - Neg - General	Patient describes experiencing negative treatment from RAH staff in a general way.
		RAH: Care - Neg - HP talk behind PT's back	Patient describes RAH health care providers talking about them behind their back.
		RAH: Care - Neg - HR approach to care - No	Patient describes RAH staff not providing a harm reduction approach to care.

		RAH: Care - Neg - Kicked out - PT afraid/threatened/was	Patient describes RAH staff threatening to kick them out or actually kicking them out of the RAH.
		RAH: Care - Neg - Staff aren't specialized in addiction care	Patient states that RAH staff aren't specialized in treating or taking care of patients with addictions.
		RAH: Care - Neg - Staff ganged up on PT	Patient describes RAH staff as communicating with one another about a patient and deciding as a group to treat that patient negatively.
		RAH: Care - Neg - Staff judge PT - Gender/Sexuality	Patient describes RAH staff as judging the patient due to their gender or sexuality.
		RAH: Care - Neg - Staff judge PT - Race/eth	Patient describes feeling judged due to their ethnicity at the RAH.
		RAH: Care - Neg - Staff judge PT DU - Current/past DU/appearance	Patient describes how staff at the RAH judge the patient by their history, or any other reason, and assume they are injecting, but they're not.
		RAH: Care - Neg - Staff judge PT DU - Drug seeking/lying pain	Patient felt RAH staff judged their descriptions of pain as drug seeking or lying.
		RAH: Care - Neg - Staff judge PT DU - General	Patient describes staff at the RAH judging them in general due to their drug use.
		RAH: Care - Neg - Staff rude/inconsiderate	Patient describes experiencing negative treatment from RAH staff, in particular describing them as rude.
		RAH: Care - Neg - Staff watch/inspect PT and/or property	Patient describes RAH staff watching/inspecting them and/or their property.
		RAH: Care - Neg - Unclear why HP rude/inconsiderate to PT	Patient doesn't know or have any suspicions as to why RAH staff were rude or inconsiderate to them.
		RAH: Care - PT control over care - No	Patient describes not having control over their care.
		RAH: Comfortable discuss IDU - No	Patient describes being uncomfortable talking to RAH staff in general about injection drug use.
		RAH: Cops/security guards - Neg interactions - General	Patient describes having negative interactions with police officers or security guards at the RAH in general.
		RAH: LAMA - General	Patient describes leaving against medical advice or wanting to, in general.
		RAH: Not honest PT DU to HP - Change meds	Patient describes not being honest regarding their drug use with RAH staff because they are afraid of having their pain med intake reduced by the healthcare provider.
		RAH: Not honest PT DU to HP - Neg consequences	Patient describes not being honest regarding their drug use with RAH staff because of negative consequences other than change of meds.

		RAH: PT HP communicate well - No	Patient describes not being able to communicate well with RAH staff.
		RAH: Trust staff - No	Patient describes not trusting RAH staff.
		RAH: PT self advocates - Neg way	Patient speaks up for themselves, asks questions, knows their rights, and speaks their opinions about their care in a negative way.
	Participants' mixed/neutral/general perceptions and experiences of the RAH	RAH: Care - Mixed - General	Patient describes the care at the RAH as being mixed.
		RAH: Comfortable discuss IDU - Semi	Patient describes feeling semi comfortable discussing injection drug use with RAH staff.
		RAH: PT exp - Other patients/visitors interactions - General	Patient describes their experiences with other patients and visitors, in general.
		RAH: Reputation	Patient describes the reputation of the RAH.
	Participants' positive perceptions and experiences of the ARCH team	ARCH: Comfortable discuss IDU - Yes	Patient describes feeling comfortable discussing injection drug use with the ARCH team.
		ARCH: Team - Pos - Compassionate and understanding	Patient describes the ARCH team as compassionate and understanding.
		ARCH: Team - Pos - HR approach to care	Patient describes an example of how ARCH has a harm reduction approach to care.
		ARCH: Team - Pos - Manage meds to control pain/withdrawal	Patient appreciates how the ARCH team manages their medications to control their pain and withdrawal symptoms.
		ARCH: Team - Pos - Patient centred care	The patient appreciates how ARCH provides patient centred care.
		ARCH: Team - Pos - Provides info/supports to PT	Patient describes the ARCH team as providing them helpful information.
		ARCH: Impression - Positive - General	Patient describes having a positive impression of the ARCH team.
		ARCH: Improves PT's perspective of RAH - Yes	Patient feels that ARCH improves patients' perspectives of the RAH.
		ARCH: PT self advocates - Pos way	Patient speaks up for themselves, asks questions, knows their rights, and speaks their opinions about their care in a positive way.
		ARCH: Trust - Yes	Patient gives an example, or in general, where they trust the ARCH team.
	Participants' negative perceptions and experiences of the ARCH team	ARCH: Team - Neg - PT participation may cause stigma	Patient states that patient participation in the ARCH program may cause stigma.

	Participants' mixed/neutral/general perceptions and experiences of the ARCH team	ARCH: Impression - Neutral/uncertain	Patient describes not thinking much about the ARCH program.
		ARCH: Team - PSW impression	Patient describes their impressions of the ARCH team peer support worker.
		ARCH: Trust - Semi	Patient describes a situation or in general where they didn't know if they could trust the ARCH team.
	Participants' positive perceptions and experiences with medication regimes	ARCH: Meds - Pain controlled - Yes	Patient describes having their pain as controlled.
		ARCH: Meds - Withdrawal controlled - Yes	Patient describes their withdrawal symptoms as controlled.
		RAH: Meds process dispensing - Pos	Patient describes feeling okay during their meds dispensing process.
	Participants' negative perceptions and experiences of the RAH	ARCH: Meds - Withdrawal controlled - No	Patient describes their withdrawal symptoms as not under control.
		RAH: Meds process dispensing - Neg	The patient describes disliking how the RAH staff dispense their meds.
		ARCH: Meds - Pain controlled - No	Patient describes their pain as not under control.
		RAH: Meds process prior dispensing - Neg	Patient dislikes that their pain medicine was withheld or given late, or was threatened to, and may perceive that this was purposefully done.
		ARCH: Meds - Med regime changed or pressure to	PT describes the ARCH team changing the med regime or pressuring them to.
	Participants' mixed/neutral/general perceptions and experiences with medication regimes	ARCH: Meds - General concern pain	The patient describes having a general concern about their pain meds.
		DU: RAH/OHF/CO - Motivation DU - Habit/addiction	Patient describes using drugs due to their habit or addiction.
		DU: RAH/OHF/CO - Motivation DU - Pain	Patient describes injecting because of being in pain.
		DU: RAH/OHF/CO - Motivation DU - Withdrawal	Patient describes injecting in the hospital because of withdrawal symptoms.
		ARCH: Meds - OAT - Imp/His	Patient describes their impressions and history with opioid agonist treatment.
		ARCH: Meds - Pain controlled - Moderately	Patient describes their pain as moderately under control.
3.7 Indigenous patients' impressions and experiences	Indigenous patients' perceptions and experiences	RAH: Friends/family treated negatively	Patient describes having friends or relatives threatened to or actually kicked out of the RAH.
		RAH: Friends/family treated positively	Patient states that their friends and relatives were treated well at the RAH.
		RAH: Care - Neg - Staff judge PT - Gender/Sexuality	Patient describes RAH staff as judging patients due to their gender or sexuality.
		RAH: Care - Neg - Staff judge PT - Race/eth	Patient describes feeling judged due to their race or ethnicity at the RAH.

4.2 Patients' experiences injecting while hospitalized at the RAH	Patients' general practices and experiences injecting while hospitalized	DU: RAH/OHF - Diverts meds	Patient describes themselves or other patients diverting their medication.
		DU: RAH/OHF - Drug market presence	Patient describes or discusses the presence of a drug market at the RAH.
		DU: RAH/OHF - Inject HO - Group	Patient describes people injecting in a group at RAH.
		DU: RAH/OHF - Inject HO - Hustles	Patient hustles in order to fund drug use while at RAH.
		DU: RAH/OHF - Inject HO - Location	Patient describes the location they inject/injected in RAH.
		DU: RAH/OHF - Inject HO - No	Patient describes not injecting at the RAH.
		DU: RAH/OHF - Inject HO - Yes	Patient describes injecting at the RAH.
		DU: RAH/OHF - Inject tubes - No	Patient has not heard of anyone injecting into their tubes on their body or they did not inject.
		DU: RAH/OHF - Inject tubes - Reasons why	Patient describes why someone would inject using one or more of the tubes on their body.
		DU: RAH/OHF - Inject tubes - Yes/Tried/Heard	Patient describes injecting, trying to inject, or hearing about injecting into one or more of the tubes connected to their body while at healthcare facilities.
		DU: RAH/OHF - PT purchased drugs in HO	Patient supplements medications by purchasing drugs.
		DU: RAH/OHF - Purchased NS while hospitalized	Patient describes purchasing needles and syringes while hospitalized.
		DU: RAH/OHF/CO - Unsafe inject - Doctoring/Dependency	Patient describes paying someone to inject themselves or injecting other people for other services, aka doctoring.
		DU: RAH/OHF/CO - Unsafe inject - General	Patient describes unsafe injecting practices in general.
		DU: RAH/OHF/CO - Unsafe inject - Infections/abscesses/ID	Patient discusses infections or abscesses as a result of their injection drug use.
		DU: RAH/OHF/CO - Unsafe inject - Inject alone	Patient describes unsafe injecting practices, specifically that people are injecting alone.
		DU: RAH/OHF/CO - Unsafe inject - Lack of supports/place/knowledge	Patient describes a lack of supportive places to inject or knowledge regarding injecting.
		DU: RAH/OHF/CO - Unsafe inject - Used syringes	Patient describes the use of used syringes.
	Patients' negative experiences injecting while hospitalized	DU: RAH/OHF - Inject HO - Neg - Being caught	Patient describes having a negative experiencing injecting in the hospital, specifically being afraid being caught.

		DU: RAH/OHF - Inject HO - Neg - Change meds	Patient describes being afraid of being caught injecting at the RAH and experiencing a change in medication prescription.
		DU: RAH/OHF - Inject HO - Neg - Cops/Security guards	Patient describes being afraid of being caught injecting at the RAH because that person might alert the police or security guards.
		DU: RAH/OHF - Inject HO - Neg - Guilty	Patient describes feeling guilty for injecting at the RAH.
		DU: RAH/OHF - Inject HO - Neg - Judge from roommates	Patient describes being afraid of their roommates at the RAH discovering them using drugs and then judging them.
		DU: RAH/OHF - Inject HO - Neg - Scrutinized	Patient describes being afraid of being caught injecting at the RAH and afterwards being scrutinized, or treated differently.
	Patients' positive experiences injecting while hospitalized	DU: RAH/OHF - Inject HO - Pos - General	Patient describes not being bothered by injecting at the RAH.
	Patients' motivations for injecting while hospitalized	DU: RAH/OHF/CO - Motivation DU - Curious/Enjoyment	Patient describes using drugs out of curiosity or enjoyment.
		DU: RAH/OHF/CO - Motivation DU - Injecting allows drug to last longer	Patient describes motivations for injecting, specifically that injecting allows the drug to last longer.
		DU: RAH/OHF/CO - Motivation DU - Prescription	Patient describes developing an addiction to a substance after the doctor prescribed that substance to the patient.
		DU: RAH/OHF/CO - Motivation DU - Habit/addiction	Patient describes using drugs due to their habit or addiction.
		DU: RAH/OHF/CO - Motivation DU - Pain	Patient describes injecting because of being in pain.
		DU: RAH/OHF/CO - Motivation DU - Withdrawal	Patient describes injecting in the hospital because of withdrawal symptoms.
4.3/4.4 Patient impressions of the NSP	Patients' general perceptions and experiences of the NSP	NSP ARCH: Pos - Some patients can't stop injecting	Patient describes a need for the needle and syringe program because some patients can't stop injecting.
		NSP ARCH: Basic - Brought sterile NS to RAH	Patient brought their own sterile needles and syringes with them to the hospital.
		NSP ARCH: Basic - Disposal NS PB - No	Patient states that disposing NS at the RAH HO is not a problem.
		NSP ARCH: Basic - Disposal NS PB - Yes	Patient states that disposing NS at the RAH is a problem.
		NSP ARCH: Basic - Given complete info on NSP	Patient describes feeling aware of the public nature of the NSP.
		NSP ARCH: Basic - Given incomplete info on NSP	The patient was not given clear information on the NSP.

		NSP ARCH: Basic - Knowledge of NSP prior to coming	Patient described knowing about or not knowing about the ARCH NSP.
		NSP ARCH: Basic - PTs will cheek or buy drugs to inject	Patient will divert their medication.
		NSP ARCH: Basic - Who offered supplies	Patient describes or states who offered them sterile injection supplies.
	Patients' positive perceptions and experiences of the NSP	NSP ARCH: Improves PT's perspective of RAH - Yes	Patient describes the NSP improving the patient's perspective of the RAH.
		NSP ARCH: Pos - Comfortable using program	Patient describes feeling comfortable using ARCH's NSP.
		NSP ARCH: Pos - General	Patient has a positive view of the ARCH needle and syringe program.
		NSP ARCH: Pos - Opens door to further care, treatment (medical), and supports	Patient describes the NSP at the RAH as a way to open the door to further treatment, care, or supports.
		NSP ARCH: Pos - PTs have responsibilities too	Patient states that PTs at the RAH have responsibilities as well, particularly PTs have responsibilities to use drugs safely.
		NSP ARCH: Pos - Reduces unsafe injection practices	Patient describes a need for ARCH's needle and syringe program, specifically that it will reduce unsafe injection practices.
		NSP ARCH: Pos - Some patients can't stop injecting	Patient describes a need for the needle and syringe program because some patients can't stop injecting.
		NSP ARCH: Trust - Yes	Patient describes trusting the ARCH needle and syringe program.
	Patients' negative perceptions and experiences of the NSP	NSP ARCH: Neg - Drug talk/offer supplies attempt to trick	Patient thought that when they were offered supplies or when they were asked about their drug use whoever was trying to trick them in some way to see if they were injecting in their room.
		NSP ARCH: Neg - Fear cut off/reduced pain meds	Patient described being afraid of using the needle and syringe program due to having their pain medication cut off or reduced.
		NSP ARCH: Neg - Fear kicked out	Patient describes being afraid being caught with supplies and being kicked out of the hospital.
		NSP ARCH: Neg - Fear lose HP trust	Patient describes being afraid that RAH staff would trust them less because of the needle and syringe program.
		NSP ARCH: Neg - Judge f HP - Maybe	Patient describes a situation where participating in ARCH's needle and syringe program might result in judgement from RAH staff.
		NSP ARCH: Neg - Judge f HP - No	Patient describes not receiving judgement from RAH staff due to using the needle and syringe program.
		NSP ARCH: Neg - Judge f HP - Yes	Patient describes a situation where participating in ARCH's needle and syringe program will result in judgement from RAH staff.
		NSP ARCH: Neg - Judge f PT - No	Patient describes not receiving judgement from other patients.

		NSP ARCH: Neg - Judge f PT - Yes	Patient describes a situation where patients who use the needle and syringe program will experience judgement from other patients.
		NSP ARCH: Neg - No safe place to inject	Patient describes that with a needle and syringe program in the RAH, there is no safe place to inject using the needle and syringe program.
		NSP ARCH: Neg - Unusual concept to PTs	Patient describes ARCH's needle and syringe program as an unusual or strange concept to most patients.
		NSP ARCH: Trust - No	Patient describes a situation or in general where patient struggled to trust ARCH's needle and syringe program.
	Participants' mixed/neutral/general perceptions and experiences of the NSP	NSP ARCH: Improves PT's perspective of RAH - No	The needle and syringe program does not improve the patient's perspective of the RAH.
		NSP ARCH: Supply trigger - Even if, still a good thing	Patient describes a situation or in general: even if offering sterile injection supplies to a patient is a trigger, it is better than not offering supplies. The benefits outweigh the risks.
		NSP ARCH: Supply trigger - Maybe	Offering sterile injection supplies might be a trigger to patients.
		NSP ARCH: Supply trigger - No	Patient describes how being offered sterile injection supplies is not a trigger.
		NSP ARCH: Supply trigger - Suggestion Prevent	Patient provides discusses preventing trigger.
		NSP ARCH: Supply trigger - Yes	Patient describes a situation where offering sterile injection supplies would be a trigger.
		NSP ARCH: Trust - Semi	Patient describes being uncertain whether he or she can trust the needle and syringe program.
		NSP CO: General	Patient provides comments regarding NSPs in the community.
4.5/4.6 Patients' suggestions to change or improve the NSP/ARCH/ RAH	Patients' suggestions to change or improve the ARCH team	ARCH: Sug - Imp/change services	Patient suggests changes or improvements to ARCH services.
		ARCH: Sug - Increase awareness/size/location of team	The patient suggest ARCH increases awareness and the size of the ARCH team.
	Patients' suggestions to change or improve the NSP	NSP ARCH: Sug - Allow all PTs access to supplies	Patient suggests that all patients should have access to needle and syringe supplies, even if they are not part of ARCH.
		NSP ARCH: Sug - Build trust first	Patients suggests one way we could improve our needle and syringe program is to build trust with patients first.
		NSP ARCH: Sug - Increase awareness of program	Patient states that ARCH could increase patient awareness of the needle and syringe program officially or by word of mouth.

		NSP ARCH: Sug - Private from HP - Yes	Patient suggests the NSP should be private from HP.
		NSP ARCH: Sug - Provide clarity of rules and ensure patients are safe accepting supplies	Patient suggests that one way to improve the delivery of the NSP is to provide clarity of the NSP rules.
		SIS ARCH/CO: Basic - PT initiated conversation about SIS	Patient initiated conversation about the supervised injection site.
		SIS ARCH: Basic - Description	Interviewer describes ARCH's supervised injection site, as well as the other supervised injection sites.
		SIS ARCH: Basic - Uncertain would use	Patient describes maybe using ARCH's supervised injection site.
		SIS ARCH: Basic - Yes would use	Patient states that they or other patients would use the ARCH supervised injection site.
		SIS ARCH: Cops/security guards - General	Patient describes security and/or the police and the SIS.
		SIS ARCH: Impression - Negative	Patient describes ARCH's SIS as negative, in general.
		SIS ARCH: Impression - Neutral/uncertain	Patient describes feeling uncertain about the SIS.
		SIS ARCH: Impression - Positive	Patient describes having a positive impression of the idea of a supervised injection site at the RAH.
		SIS ARCH: Neg - Co-inject/Codependency	Patient describes or discusses peer injection.
		SIS ARCH: Neg - Fear/lack of trust	Patient describes how some patients might be afraid of using the supervised injection site and might not fully trust the site, and this might be a barrier.
		SIS ARCH: Neg - Habit/ritual	Patient describes how some patients might experiencing barriers to using the RAH SIS because of their type of injecting habit or injecting is a ritual.
		SIS ARCH: Neg - Change medication regime	Patient states that if a patient uses the SIS their healthcare professionals will suspect they are cheeking their meds and then change their medication regime.

		SIS ARCH: Neg - Fear trouble/kicked out	Patient describes how some patients might be afraid of using the SIS because they would be afraid of being kicked out or getting into trouble.
		SIS ARCH: Neg - Judge f HP	Patient describes the possibility of RAH staff judging patients who use the SIS.
		SIS ARCH: Neg - Judge f other PTs	Patient think he or she would receive judgement if another patient sees them use the RAH SIS.
		SIS ARCH: Neg - Possibility to trigger/facilitate PTs inject	Patient describes the possibility that the SIS might trigger patients who have quit to inject again, or might not facilitate a reduction or termination of injecting in those currently injecting.
		SIS ARCH: Neg - PT will cheek or buy meds to inject	Patient states that patients will attempt to cheek or buy meds in order to inject at the SIS.
		SIS ARCH: Neg - PTs cause problems	Patient states that the presence of the supervised injection sites in the RAH will increase problems.
		SIS ARCH: Pos - Don't have to carry supplies	Patient describes a need for RAH SIS because the patient wouldn't have to carry around used supplies.
		SIS ARCH: Pos - Needle debris	Patient describes a need for a supervised injection site in order to help reduce needle debris.
		SIS ARCH: Pos - No safe places to inject	Patient describes how there is a need for an SIS because of a lack of safe and clean places to inject.
		SIS ARCH: Pos - Opens door to further care, treatment (medical), and supports	Patient describes the SIS at the RAH as a way to open the door to further treatment, care, or supports.
		SIS ARCH: Pos - Public safety	A situation is highlighted where there is a need for supervised injection site to ensure public safety.
		SIS ARCH: Pos - Reduce risk of negative interactions cops/guards	Patient states that the SIS will reduce the risk of patients having negative interactions with police officers and security guards.
		SIS ARCH: Pos - Miss/infections	Patient describes a need for a place to inject safely in the hospital due to sharing injection supplies and developing infections.

		SIS ARCH: Pos - Risk of overdose/drug type	Patient describes a need for an SIS due to the types of drugs used by people, thus perhaps risk of overdose.
		SIS ARCH: Pos - Weather/streets	Patient describes a need for a place to inject safely and cleanly in general, in Edmonton, or in the hospital due to the weather here in Edmonton or aspects of life on the streets.
		SIS ARCH: Pos - Welcoming/accepting place	Patient describes a need for the SIS, specifically because it would be a place where people who use would feel welcomed and accepted.
		SIS ARCH: Sug - Accessible	Patient suggests we make RAH SIS physically accessible.
		SIS ARCH: Sug - Be accepting of all	Patient describes how it is important that the SIS be accepting of all patients.
		SIS ARCH: Sug - Ed/assistance injecting	Patient describes a desire for education or actualy assistance injecting from the RAH SIS.
		SIS ARCH: Sug - If private from HP - What if?	If the patient's usage of the SIS should be kept private, then what if…?
		SIS ARCH: Sug - Private from HP - No	Patient states that it is not important whether or not RAH staff know the patient is using the supervised injection site.
		SIS ARCH: Sug - Private from HP - Yes	Patient suggests that their usage of the SIS should be kept private from RAH staff.
		SIS ARCH: Sug - Private from PT - No	Patient states that it is not important whether or not other patients know the patient is using the SIS.
		SIS ARCH: Sug - Private from PT - Yes	Patient states he or she wants the ARCH SIS to be private from other patients.
		SIS ARCH: Sug - Process suggestions	Patient gives a suggestion to improve the process of the SIS.
		SIS ARCH: Sug - PTs should be able to inject prescribed meds	Patient states that patients should be able to inject their prescribed meds.

		SIS ARCH: Sug - PTs who don't inject - General	Patient describes supervised injection sites for people who don't inject, in general.
		SIS ARCH: Sug - Secluded/Discrete	Patient describes the ARCH supervised injection site should be secluded.
		SIS ARCH: Sug - Spread awareness officially or by word of mouth	Patient suggests that in order to build trust with patients we spread awareness of the supervised injection site officially or by word of mouth from people with experience.
		SIS CO: General	Patient states that the SIS in the community must be spread out across the city.
		SIS CO: Neg - Only a bandaid, not solving cause of problem	Patient describes the SIS in the community as only a bandaid and as not solving the cuase of the drug problem.
		SIS CO: Vancouver - Impressions	Patient describes their impressions of the supervised injection site in Vancouver.
		SIS CO: Vancouver Used Y/N	Patient describes using the supervised injection site in Vancouver
		SIS CO: Vancouver/Edmonton Heard Y/N	Patient had heard of the supervised injection site in Vancouver.
		SIS: RAH/OHF/CO - Small private booths	Patient states that the SIS in both the hospital and the city should look like small private booths.
	Patients' suggestions to change or improve the RAH	RAH: Sug - Ensure staff patient-centred HR approach	Patient states that one way the RAH could improve care would be to ensure staff practices a patient centred and harm reduction approach to care.
		RAH: Sug - Greater communication/autonomy PTs/HP	Patient describes one way to improve care at the RAH would be to provide patients greater control or autonomy over their care.
		RAH: Sug - HP should allow PTs to inject meds	Patient suggests RAH staff should allow patients to inject their pain medication.
		RAH: Sug - Security - General	Patient gives a suggestion to improve care at the RAH, specifically something regarding security.
Initially, I believed these codes may have been relevant to answer my research questions. However, after further analysis I decided not to include these codes in my results chapters. The reason why I did not include these codes is described in the second column.			

	I did not find it appropriate or relevant to describe the racism that some Indigenous patients exhibited.	GE: CO - Race/eth - PT towards Others	Patient makes negative remarks towards other people regarding their race or ethnicity.
	Given I was explicitly attempting to understand the culture within the RAH, I did not feel it was appropriate to describe patients' experiences in other healthcare facilities.	HF: Other - Neg (or worse) care - HP race/eth towards PTs	Patient describes experiencing negative treatment from healthcare providers at healthcare facilities due to their race.
		HF: Other - Neg (or worse) care - HP Trust - No	Patient describes not trusting healthcare providers in general.
		HF: Other - Neg (or worse) care - Judgement	Patient describes experiencing negative or worse treatment at other healthcare facilities - specifically judgement.
		HF: Other - Neg (or worse) care - Kicked out/LAMA	Patient describes receiving negative or worse care at other HCF, specifically the patient was kicked out.
		HF: Other - Neg (or worse) care - Meds/Pain/Withdrawal/Treatment	Patient describes an example or the possibility of being caught with injecting supplies or in the process of injecting in a health care facility and as a result their medicine regime changed.
		HF: Other - Pos (or better or same) care - General	Patient describes having or experiencing better treatment at other healthcare facilities, not the RAH. Specifically the patient described experiencing good or better care.
	I did not find these codes relevant to my research questions.	RAH: PT exp - Bored	Patient describes whether or not they have been bored at the RAH.
		RAH: PT exp - Only/mainly been to RAH	Patient states that the Royal Alexandra Hospital is the only or main hospital they have been to.
		RAH: Sug - Food/enter/room	Patient states that there should be better food/entertainment/rooms at the RAH.