

Nova Scotia Policy Analysis Case Report

Canadian Harm Reduction Policy Project (CHARPP)

August 2017

This research was conducted as part of the Canadian Harm Reduction Policy Project (CHARPP), a mixed-method, multiple-case study drawing on four data sources (policy documents, key informant interviews, media portrayals, and a national public opinion survey) to describe how policies governing harm reduction services are positioned within and across the 13 Canadian provinces and territories.

CHARPP is supported by an operating grant from the Canadian Institutes of Health Research.

Report Authored by:

Jalene Anderson-Baron, School of Public Health, University of Alberta

Kamagaju Karekezi, School of Public Health, University of Alberta

Jakob Koziel, School of Public Health, University of Alberta

Ashley McCurdy, School of Public Health, University of Alberta

CHARPP Project Leads

T. Cameron Wild, Professor, School of Public Health, University of Alberta (Co-Principal Investigator)

Elaine Hyshka, Assistant Professor, School of Public Health, University of Alberta (Co-Principal Investigator)

Donald MacPherson, Executive Director, Canadian Drug Policy Coalition (Principal Knowledge User)

CHARPP Co-Investigators

Mark Asbridge, Associate Professor, Faculty of Medicine, Dalhousie University

Lynne Bell-Isle, National Programs Consultant, Canadian AIDS Society

Walter Cavalieri, Director, Canadian Harm Reduction Network

Carol Strike, Associate Professor, Dalla Lana School of Public Health, University of Toronto

Colleen Dell, Professor, School of Public Health, University of Saskatchewan

Richard Elliott, Executive Director, Canadian HIV/AIDS Legal Network

Andrew Hathaway, Professor, Department of Sociology and Anthropology, University of Guelph

Keely McBride, Project Lead, Public Health and Wellness Branch, Alberta Health

Bernie Pauly, Scientist, Centre for Addiction Research of BC

Kenneth Tupper, Director, Implementation & Partnerships, British Columbia Centre on Substance Use

Related citations:

Wild, T. C., Pauly, B., Belle-Isle, L., Cavalieri, W., Elliott, R., Strike, C., ... & Hyshka, E. (2017). Canadian harm reduction policies: A comparative content analysis of provincial and territorial documents, 2000–2015. International Journal of Drug Policy, 45, 9-17.

Contents

1.0 Overview	4
1.1 Contextual Background	4
1.2 Healthcare Governance.....	5
1.3 Substance Use Trends	5
1.3.1 Opioids.....	6
1.4 Harm Reduction Services in Nova Scotia	7
2.0 Methods.....	9
2.1 Search Process.....	9
2.2 Inductive Analysis.....	10
2.3 Deductive Analysis	10
3.0 Documents Retrieved	11
4.0 Results: Inductive Analysis of Documents	13
4.1 There is a minimal commitment to harm reduction in current provincial-level policy, and limited practical guidance on how to implement this approach.....	13
4.2 Current policy documents for Nova Scotia do not share the same understanding of a harm reduction approach.....	17
4.3 In comparing current to historical policy documents, the commitment to harm reduction in provincial policy has remained stagnant over the last decade.....	20
4.4 Nova Scotia’s policy documents demonstrate a strong commitment to monitoring and evaluation of policy initiatives.	21
5.0 Results: Deductive Analysis of Current Documents (Nova Scotia Policy Report Card)	23
Table 1: Presence of key population indicators in current policy documents.....	23
Table 2: Presence of key program indicators in current policy documents	24
Table 3: Proportion of policy quality indicators endorsed for all documents within cases	26
6.0 Conclusion.....	27
Appendix A: Systematic search strategy flow diagram.....	28
Appendix B: Standard methodology for generating provincial/territorial case report.....	29
Appendix C: Descriptive summary of current policy documents.....	32
References	34

1.0 Overview

This document provides a descriptive and analytical account of Nova Scotia’s provincial harm reduction policy documents produced between 2000 and 2015. This account is part of the Canadian Harm Reduction Policy Project (CHARPP), a multimethod multiple case study comparing provincial/territorial harm reduction policies across Canada. Nova Scotia results reported in this document will be summarized and integrated into a national-level report that outlines key features of each set of provincial/territorial policies, and compares the strength of each case’s policy commitment to harm reduction services.

This document begins with an overview of Nova Scotia’s harm reduction policy context including: governance, healthcare delivery structures, substance use trends and harm reduction programming. Next, a description of study methodology is provided, including information about the policy documents retrieved during a systematic search. Finally, we detail the results of our inductive and deductive policy analysis.

Four key findings are highlighted from the inductive analysis: 1) There is a minimal commitment to harm reduction in current provincial-level policy, and limited guidance on how to implement this approach; 2) Current policy documents for Nova Scotia do not share the same understanding of a harm reduction approach; 3) In comparing current to historical policy documents, the commitment to harm reduction in provincial policy has remained stagnant over the last decade; 4) Nova Scotia’s policy documents demonstrate a strong commitment to monitoring and evaluation of policy initiatives. Results of the deductive analysis are presented in a policy report card.

1.1 Contextual Background¹

Nova Scotia is one of three Atlantic Provinces in Canada, spanning 52,939 square kilometers. It has a population of 921,727 with four major cities: Halifax (population of 390,328), Cape Breton (population of 101,619), Truro (population of 45,888), New Glasgow (population of 35,809), and Kentville (population of 26,359) (Statistics Canada, 2012).

As with other Atlantic provinces, the Liberal and Conservative parties have been the primary governing parties in Nova Scotia over the past several decades. In 2009, the first NDP majority government was briefly elected in the province. However, in 2013, Liberals regained dominance by forming a majority and electing Stephen McNeil as Nova Scotia’s premier (Logan, 2009).

¹ Contextual information in sections 1.1 to 1.4 is current up to the end of 2016.

Stephen McNeil has not made an official stance on harm reduction since this time. Leo Glavine has been minister of health since 2013, through to the end of 2016. He referred to the *Direction 180 Center*, a low-threshold methadone maintenance program, as “a vital program” (Ward, 2016). Other than this, he has not made public any official stances on harm reduction.

1.2 Healthcare Governance

The Department of Health and Wellness is responsible for legislation, strategic direction, system planning, information management, monitoring and evaluating programs, as well as policy and standards development (Department of Health and Wellness, 2015). The Department of Health and Wellness was created in 2011 after the merger of two departments; “Health Promotion and Protection” and “Health” (Institute of Public Administration of Canada, 2013). This is one of many changes Nova Scotia’s health system has undergone since 1996. Prior to this time, 36 local hospital boards operated Nova Scotia’s health system until they were amalgamated into four regional health boards in 1996. In 2001, those four regional health boards were expanded into nine district health authorities (DHAs) who managed all the public health programs, hospitals, mental health, and community health services in Nova Scotia (Institute of Public Administration of Canada, 2013). Nova Scotia’s DHA’s existed until 2015 when the province reorganized its health system structure by amalgamating the previous DHA’s into one centralized health authority; the Nova Scotia Health authority. Currently, the Nova Scotia Health Authority is responsible for health care delivery in the province (Knox, 2015). The authority employs over 23,400 non-unionized and unionized employees, including 3,204 practicing physicians and 7,000 volunteers, and manages approximately 153 healthcare facilities in the province (Nova Scotia Health Authority, 2016, NSHA Fact Sheet). The current President and CEO of the Nova Scotia Health authority is Janet Knox (Knox, 2015).

1.3 Substance Use Trends

Data extracted from various surveys and data sources including the *Canadian Alcohol and Other Drug Use Monitoring Survey (CADUMS)*, *The Canadian Student Tobacco, Alcohol, and Drugs Survey (CSTADS)*, and the *Nova Scotia Student Drug Use Survey* reveals important trends regarding illicit drug use in Nova Scotia.

According to data drawn from *CADUMS*, lifetime illicit drug use (including Cannabis) among Nova Scotia Residents remained relatively consistent from 2011 (44.9%) to 2012 (44.0%). In contrast, past year illicit drug use decreased over this time period, from 14.1% (in 2011) to 12.9% (in 2012). Despite this decrease, the average national lifetime and yearly rates of illicit drug use in Nova Scotia were higher than the rest of Canada in 2012, at 43.2% and 11.3%

respectively. A higher prevalence of cannabis use among Nova Scotia respondents can account for higher than national averages regarding lifetime and yearly illicit drug use.

Lifetime intake of illicit drugs (excluding Cannabis) such as Cocaine/crack, Speed, Ecstasy, Hallucinogens, and Heroin, increased among Nova Scotia respondents between 2011 (11.9%) and 2012 (12.9%), yet was lower when compared with respondents from other Canadian provinces in both 2011 (14.5%) and 2012 (15.4%) (Statistics Canada, 2012; 2014). There is limited information regarding mode of drug use in the region. The *2012 Halifax Regional Municipality Drug use Report* found that 30% of respondents, employed in various drug related occupations, believed intravenous drug use had increased in the Halifax Region (Black et al., 2012).

The *2013 CSTADS* found that in 2012, 5% of Nova Scotia youth reported using MDMA, Heroin, Cocaine, amphetamines, or hallucinogens to get high, which is on par with the national average (Propel Centre for Population Health Impact, 2014). The *2012 Nova Scotia Student Drug Use Survey* found that 41.2% of youth (in grades 7 to 12) reported using in the last 12 months one or more of the following substances: cocaine, crack cocaine, LSD, cannabis, mephedrone, salvia, mescaline, psilocybin, methamphetamine, MDMA, non-medical use of cold or cough medicine, stimulants, pain relief pills, or tranquilizers. While a student's use of drugs other than tobacco, alcohol, or cannabis increased from 1.2% in 2007 to 2.9% in 2012, the survey found no significant differences regarding student's use of illicit substances between 2007 and 2012 (Asbridge & Langille, 2013).

Harms from illicit drug use have decreased in recent years. According to *CADUMS* data, 1.5% of respondents in 2012 reported experiencing physical, emotional, or financial harm related to their substance abuse in the past year; a decrease from 2011 (3.9%) (Statistics Canada, 2012; 2014). Among students who used drugs in the previous 12 months, the three most commonly reported problems were driving under the influence of cannabis, unplanned sex while high, and preventing students from buying other things due to spending on drugs (Asbridge & Langille, 2013). Despite the apparent decrease of drug use in the province, there have been a significant number of drug related deaths, especially when compared with other eastern provinces. A 2013 study reported 617 drug-related deaths in Nova Scotia between 2007 and 2010, of which 66 (10.7%) were illicit drug-related (Ling, 2013).

1.3.1 Opioids

Halifax has been labelled "pill city" due to issues related to opioid prescription addiction in the province (Kirkland et al, 2016). Popova et al., (2006) found that Nova Scotia had the highest rate

of illegal opioid use (1.3%) in the country. According to Kirkland et al., (2016), 12,000 residents in Nova Scotia are dependent on opioids. Additionally, there were 342 fatal prescription overdoses between 2007 and 2014 from methadone, hydromorphone, morphine, oxycodone, fentanyl, and codeine (Kirkland et al., 2016). Another study found that between 2009 and 2011, Hydromorphone contributed to 19% of drug-related deaths, morphine 11%, and oxycodone 9%, compared with only one heroin-related death (Dooley et al., 2012). There were 13 fentanyl related deaths in the province between 2009 and 2014 (Canadian Center on Substance Abuse, 2013). However, recent months have seen an alarming spike in overdose deaths in the province, in line with other regions in the country. In the first eight months of 2016, 70 people died of opioid overdoses, with 10 deaths linked to fentanyl directly (Roberts, 2016).

While numbers of illicit drug use are high, they are still lower than prescription opioid use. According to Ling (2013), “the average rate of prescription drug-related deaths is more than four times as great as the average rate of illicit drug-related deaths, and the average rate of alcohol/ over-the-counter drug-related deaths is approximately six times as great as illicit drug-related deaths” (pg. 13). The 2012 *Halifax Regional Municipality Drug Use Report* found the most reported drugs injected in the Halifax Municipality were prescription opioids (67%). Additionally, 88% of respondents stated that hydromorphone (Dilaudid) was a serious problem in the city, while 20% stated that meperidine (e.g Demerol) was problematic (Asbridge & Langille, 2013).

1.4 Harm Reduction Services in Nova Scotia

Nova Scotia has a long history of harm reduction, beginning with an unofficial needle exchange program led by the Nova Scotia Persons with AIDS Coalition (NSPWAC) in 1989 (Kirkland et al, 2016). In response to the increase in HIV/AIDS infections, Nova Scotia launched the second Strategy on HIV/AIDS in 2003. One of the strategic directions as part of their recommendations was in building “a coordinated approach to prevention and harm reduction” (Provincial HIV/AIDS Strategy Steering Committee, 2003). Since 2003, every HIV/AIDS strategy in the province incorporated some elements of harm reduction. While Nova Scotia’s government and health department appear to incorporate harm reduction as one of their provincial strategies regarding HIV/AIDS, there is disagreement amongst researchers on how devoted the province is to harm reduction. In a commentary examining Nova’ Scotia’s provincial strategy on HIV counselling and testing, Gahagan and coworkers (2010) argued that Nova Scotia’s provincial strategy on HIV/AIDS operates from a harm-reduction perspective regarding HIV testing and counselling. On the other hand, Cavalieri & Riley (2012) argue that Nova Scotia’s harm reduction interventions are more constrained due to the conservative political landscape and that there is no provincial leadership advocating for harm reduction as evident by the lack of permanent funding for harm reduction services. Currently, the province provides the following

harm reduction interventions: needle exchange, low threshold methadone and buprenorphine, and street outreach.

The Nova Scotia Health Authority is responsible for the provision and funding of harm reduction services in the province (Chiu, 2016). The Mi'kmaw Native Friendship Centre operates the majority of Harm reduction programs in Nova Scotia including the main needle exchange program (Mi'kmaw Native Friendship Centre, 2016). The Mainline Needle Exchange, established in 1992, was the first Atlantic needle exchange program (Parker et al., 2012). The mainline Needle Exchange program offers clean syringes and needles, cookers, sterile water, filters, matches, condoms, ties, safer use kits, as well as safe disposal of used needles. In addition to distributing harm reduction supplies, the programs educates and provides awareness related to safer injection, safer practices, and harm reduction (Mainline, 2016). In 2012, the mainline needle exchange program distributed over 565,000 sterile needles. In 2013, that number increased by 14% (CBC News, 2013). In 2015-16, mainline serviced 26,474 contacts; a 42% increase from ten years ago (Chiu, 2016).

In Nova Scotia, there are seven Methadone Maintenance Clinics² (MMT). The College of Physicians and Surgeons of Nova Scotia (CPSNS) sets the guidelines and standards for methadone treatment and manages the distribution of methadone. In order for physicians to prescribe methadone, a physician must be in good standing with the CPSNS and hold a license to practice medicine in Nova Scotia. The physician will also need to both complete clinical training with an MMT approved physician as well as complete a specialized course. Once that is complete, they must send an application form to practice (College of Physicians and Surgeons of Nova Scotia, 2012). Like with other Atlantic provinces, Nova Scotia does not offer MMT training within the province and physicians must travel to Toronto (Luce, 2011). Of the seven-methadone clinics, one operates from a low threshold philosophy and offers street outreach. Direction 180 is a low-threshold methadone clinic that has been in operation since 2001. In addition to offering this service, the center also provides street outreach in the form of a mobile bus that seeks to “broaden access to methadone treatment in various communities throughout the city.” The bus tours the province and offer methadone for those that need it (Direction180, 2016). There are currently no safe injection sites and no safer inhalation distribution programs offered in the province. Other harm reduction interventions have been incorporated by private businesses. In 2015, organizers of the annual Evolve Music festival sought to incorporate drug testing into their music festival as a means of reducing overdoses (Bradley, 2015). However, the music festival canceled drug checking once their insurance pulled

² Addiction Prevention and Treatment Services Methadone Maintenance, Glace Bay Health Care Facility Opiate Recovery Program, Direction 180, Annapolis Valley Health Chipman Building, Annapolis Valley Health Soldier's Memorial Hospital, Northside General Hospital Opiate Recovery Program, Opiate Treatment Program

out as a response to the idea of providing drug testing in the festival (CBC News, 2015).

In addition to the aforementioned programs and services, AIDS Coalition of Nova Scotia is an organization devoted to helping those living with HIV/AIDS. The organization also offers a program, “Totally Outright” which is focused on providing youth peer leaders with a plethora of skillsets including harm reduction practices (AIDS Coalition, 2015).

2.0 Methods

We performed a comprehensive search of publicly-accessible Canadian harm reduction policy documents published from 2000 – 2015. Documents produced for Nova Scotia during this period were (a) analyzed and synthesized inductively to describe historical³ and current⁴ policy developments guiding harm reduction services in the province over this time period, and (b) reviewed collectively and evaluated using a deductive coding framework comprised of 17 indicators, assessing the quality of harm reduction policies in order to facilitate cross-case comparison.

2.1 Search Process

A separate paper provides complete methodological details regarding the National search process (Wild et al., 2017). Systematic and purposive search strategies identified and verified publicly-available policy documents produced from 2000 – 2015. We defined relevant documents as harm reduction policy texts that (1) were issued by and representing a provincial or territorial government or (2) issued by and representing a regional, provincial, or territorial delegated health authority; (3) that mandated future action; and (4) that addressed one of seven targeted harm reduction interventions⁵ or (5) were produced as either a stand-alone harm reduction policy or as part of a strategy document guiding services for substance use, addiction, mental health, and/or prevention of blood-borne or sexually transmitted infections. We excluded documents that described services at the municipal level, in prisons, and on First Nation reserves (where health services are the responsibility of the federal government). Additionally, given our focus on provincial and territorial policy frameworks, and not harm reduction practice, we excluded government or health authority authored documents exclusively focused on best practice guidelines for frontline service providers.

³ A document was considered historical when (1) the years the policy applied to had passed, (2) the document was replaced by a newer document, or (3) the document was no longer available online.

⁴ A document was considered current when (1) the policy was in effect in 2015 (2) the document was the most recent version retrieved for the case and had not been replaced by a newer document of the same focus, and/or (3) the document had no stated end date.

⁵ The seven harm reduction interventions of interest to this research are 1) syringe distribution, 2) Naloxone, 3) supervised consumption, 4) low threshold opioid substitution, 5) outreach, 6) drug checking, 7) safer inhalation kits.

Six current and six historical documents were identified and analyzed using a two-step (inductive and deductive) process described below (Appendix A provides the Nova Scotia-specific search strategy).

2.2 Inductive Analysis

Each of the 12 documents was analyzed using a three-step process (Appendix B provides analytic details). First, relevant text⁶ was extracted from each policy document and analyzed, resulting in a set of analytic notes. The focus of the analytic notes was primarily descriptive and instrumental (i.e., generating a deeper understanding of the intent and purpose of the policy document and the relevant stakeholders and their roles). Next, each document's analytic notes and a set of accompanying quantitative data (see Appendix B) were synthesized and compiled into a narrative document description. Finally, all narrative document descriptions for the case were synthesized and compiled into a single document. This resulted in a descriptive summary, describing the main themes and trends in Nova Scotia's set of harm reduction policy documents over the 15-year study period.

2.3 Deductive Analysis

We developed the CHARPP framework, a set of 17 indicators, to assess the quality of policy documents based on how well they described key *population characteristics* and *program features* of a harm reduction approach. To develop the CHARPP framework, a list of indicators was generated based on key harm reduction principles outlined by the International Harm Reduction Association (2010) and the World Health Organization (2014). These indicators were refined through consultation with a working group of harm reduction experts from across Canada to ensure they reflected quality indicators of harm reduction policy in Canada.

Four current original Nova Scotia policy documents were content analyzed using this framework. Two current documents were excluded as they were progress reports that did not provide a significant amount of new information. Each of the four documents were reviewed for the presence (1 = yes, criteria met) or absence (0 = no, criteria not met) of each quality indicator. Dichotomous scores for each indicator were justified with an accompanying written rationale. Scores and rationales were then compiled into a standardized *policy report card* for each provincial or territorial case to facilitate comparisons of harm reduction policy across jurisdictions

⁶ "Relevant text" refers to text that directly or indirectly relates to the provision of harm reduction services, including any mention of harm reduction or the seven interventions of interest.

3.0 Documents Retrieved

We retrieved six current and six historical documents, all produced at the provincial level. No documents were found for regional health authorities. Of these 12, eight were update or reporting documents. See Table 1 below for further information on each document. Additional descriptive summaries of each policy document are included in Appendix C.

Table 1: Descriptive Details of Nova Scotia’s Policy Documents

		DOCUMENT TITLE	AUTHORS	YEAR PUBLISHED	YEARS ACTIVE
CURRENT POLICY DOCUMENTS					
Provincial Level	1	Nova Scotia's Strategy on HIV/AIDS	Provincial HIV/AIDS Strategy Steering Committee	2003	Not stated
	2	Review of NS Strategy on HIV/AIDS: Looking Back and Moving Forward	Nova Scotia Advisory Commission on AIDS and Collective Wisdom Solutions	2014	Not stated
	3	Nova Scotia Adolescent Withdrawal Management Guidelines	Government of Nova Scotia	2013	Not stated
	4	Together We Can: The plan to improve mental health and addiction care for Nova Scotians	Government of Nova Scotia	2012	Not stated
	5	Together We Can: Our First Year	Government of Nova Scotia	2013	Not stated
	6	Together We Can Progress Update 2015	Government of Nova Scotia	2015	Not stated
HISTORICAL POLICY DOCUMENTS					
Provincial Level	7	Annual update on the implementation of the NS Strategy on HIV/AIDS 2005	Nova Scotia Advisory Commission on AIDS	2005	Not stated
	8	Second Annual update on the implementation of the NS Strategy on HIV/AIDS 2006	Nova Scotia Advisory Commission on AIDS	2006	Not stated
	9	Third Annual update on	Nova Scotia Advisory	2007	Not

	the implementation of the NS Strategy on HIV/AIDS 2007	Commission on AIDS		stated
10	Fourth Annual update on the implementation of the NS Strategy on HIV/AIDS 2008	Nova Scotia Advisory Commission on AIDS	2008	Not stated
11	Fifth Annual update on the implementation of the NS Strategy on HIV/AIDS 2009	Nova Scotia Advisory Commission on AIDS	2009	Not stated
12	Standards for Blood Borne Pathogens Prevention in Nova Scotia	Public Health, Nova Scotia Department of Health; Addiction Services, Nova Scotia Department of Health	2004 – review in 2006	Not stated

4.0 Results: Inductive Analysis of Documents

4.1 There is a minimal commitment to harm reduction in current provincial-level policy, and limited practical guidance on how to implement this approach.

In total, 12 documents were found for Nova Scotia, representing the third largest policy set for a Canadian province or territory – behind only British Columbia and Quebec. Despite the relatively large size of the policy framework, there is little endorsement of harm reduction in current policy and limited practical guidance on implementing a harm reduction approach.

No stand-alone or named harm reduction policies exist for the province, and only half of the documents in the set were considered current. This means the contemporary provision of harm reduction services and programs across the province is guided by these six documents alone. One of these, *Nova Scotia Adolescent Withdrawal Management Guidelines* (2013) [3], applies to a narrow subset of the population (adolescents who use substances), leaving five current documents that apply to the provincial population as a whole – *Together We Can: The plan to improve mental health and addiction care for Nova Scotians* (2012)[4] and its two progress reports[5,6]; as well as *Nova Scotia's Strategy on HIV/AIDS* (2003)[1]; and the final update report for this document, *Review of Nova Scotia's Strategy on HIV/AIDS: Looking Back and Moving Forward* (2014)[2].

4.1.1 Harm reduction in addiction and mental health policy

Together We Can: The plan to improve mental health and addiction care for Nova Scotians[4] was published in 2012, and provides no direction on harm reduction whatsoever. Although various concerns associated with prescription drug use are noted in the document, including overdose, harm reduction is never addressed - nor are any of the seven interventions of interest. The strategy instead proposes recommendations in-line with an abstinence based treatment model, prioritizing recovery from substance use. Two update documents were published to report on progress and guide future direction around the strategy. These endorse the same approach to substance use, and neither mentions harm reduction or any related interventions.

4.1.2 Harm reduction in STBBI policy

In contrast to the above, *Nova Scotia's Strategy on HIV/AIDS* (2003)[1] does endorse a harm reduction approach, albeit ambiguously. Harm reduction is positioned as one of the document's four strategic directions; "Build a coordinated approach to prevention and harm reduction" (p. 15). It is defined as being part of a public health approach to addressing harmful behaviours, with the "spread of blood-borne pathogens" being the only specific example of a harm listed

(p.43). Harm reduction is framed as a method for preventing the transmission of HIV throughout the document, with “initiatives based on a harm reduction approach” noted as a feature of a “comprehensive prevention strategy for HIV/AIDS (p.18). Under the strategic direction outlined above, only one action item (3.4) pertains to harm reduction. It states:

“Develop and implement a comprehensive prevention strategy that includes initiatives based on a harm reduction approach for different populations within a variety of service settings. (This includes a network of anonymous testing services, access to barrier prevention methods, needle exchange programs, and methadone maintenance treatment services in both community and correctional facilities.)” (p.18)

The call for the use of a harm reduction “approach” suggests actions may go beyond the delivery of services, to also include policy and practices. The call for initiatives that address different population needs also suggests support for use of a population health approach to prevention; enabling health service planners to take into consideration the specific needs of sub-populations and respond to these needs appropriately. The document lists several interventions that should be included in the “ range of province-wide prevention and harm-reduction services”, including access to barrier prevention methods, anonymous testing sites, needle exchange programs with peer-based delivery and support, and an accessible continuum of methadone services (p.18). The authors state this is not an exhaustive list, however, the examples presented reinforce the suggestion that harm reduction is framed foremost as a prevention strategy for STBBIs. Among the interventions presented, “needle exchange programs” are the only intervention of interest to our research. While this recommendation indeed promotes a harm reduction approach, it does not translate well into action. The description of harm reduction is very general, it applies narrowly to preventing STBBI transmission, and only one intervention of interest is noted as a potential strategy. Coupled with the lack of any detailed implementation plan, this document alone conveys little more than rhetorical support for harm reduction.

A strength of this strategy is that annual updates on implementation were consistently published over a ten-year period following publication of the original strategy, totaling seven documents. The final report, *Review of Nova Scotia Strategy on HIV/AIDS: Looking Back & Moving Forward*[2], is the only other document in the series considered to be current (aside from the original), and is framed as an implementation assessment of the *2003 Strategy*[1] to guide the Commission, provincial government and other stakeholders as they reimagine and renew the provincial HIV/AIDS strategy in light of a changing policy landscape. The *Review*[2] provides a more extensive discussion around harm reduction; and reflects an understanding of the approach more closely aligned with internationally recognized standards (HRI, 2010). It is evident from evaluation findings that harm reduction services (needle exchange, low threshold

MMT, mobile outreach) were an integral component of the health system's response to HIV/AIDS prevention during the implementation period. For example, expansion of needle exchange and low threshold MMT were observed in both rural and urban areas of the province since 2003 (p.25). However, an assessment of service gaps indicated that further expansion of harm reduction services was required to meet the needs of people living with HIV/AIDS and vulnerable populations (p.43). This assessment identified expansion of needle exchange as one of a number of "priorities" for the future (p.v).

The authors present seven "*Recommendations for Moving Forward*" (p. 53-57) that respond to challenges and service gaps highlighted in the review. Though the authors paid specific attention to harm reduction and related services within the evaluation, and named harm reduction interventions as priorities for the future, only one recommendation explicitly endorses harm reduction:

"The DHW, professional organizations, and universities should identify opportunities (e.g., continuing Medical Education, professional conferences) to increase the training of medical doctors and other health professionals and front-line providers around stigma, cultural competency, harm reduction, and the basics of HIV and HIV and aging" (p.56).

Though promising to see the inclusion of harm reduction training in efforts to increase knowledge and reduce stigma among health professionals, this recommendation does not address the expansion of harm reduction services at all. In fact, none of the seven policy recommendations explicitly address the expansion of harm reduction services, nor are any of the previously identified gaps addressed. Recommendations largely address the need for improved delineation of roles and responsibility, and preparation for the shifting policy landscape. The lack of specificity surrounding endorsed interventions (needle exchange, low threshold MMT, outreach), as well as the absence of additional interventions that prevent STBBI transmission (i.e. supervised consumption, Suboxone, safer inhalation kits) appear to water down harm reduction related future priorities identified earlier in the review. In summary, although this document addresses harm reduction more thoroughly than the original strategy, it provides little in the way of directing action around harm reduction in the future.

4.1.3 Harm reduction in withdrawal guidelines

The sixth and final current document in the policy set is the *Nova Scotia Adolescent Withdrawal Guidelines*[3], published in 2013. As stated above, this policy applies to a narrow subset of the population, specifically "13- to 18-year-olds in all settings that are expected to provide withdrawal management services to adolescents" (p.6). The document is comprehensive and covers many facets of working with youth in this context. In terms of harm reduction, however, discussion is limited and the approach is not explicitly endorsed.

Three interventions of interest are noted in this document, although only two (Narcan, Suboxone) are explicitly promoted within the guidelines. The third (needle exchange) is mentioned in a discussion of injection risk, but does not appear to be promoted in the context of these guidelines. Notably, within the document, Narcan and Suboxone are never characterized as “harm reduction” interventions. Suboxone is promoted in the context of ending substance use – by means of withdrawal and/or treatment. Narcan is recommended for youth who might overdose in withdrawal units. There is no recognition of these interventions reducing harms for people who use substances, or playing a role in reducing harms otherwise.

As far as more general endorsement of a harm reduction approach, it is quite unclear how the document characterizes or endorses harm reduction. Notably, taking a harm reduction approach was noted as part of the “program philosophy and approach” (p.17), but there are no details provided. Furthermore, it appears approaches that contradict the basic principles of harm reduction are more frequently endorsed. For example, in outlining the primary principles of withdrawal management, stated goals include, “provide a safe withdrawal from the drug of dependence and enable the patient to become “drug-free” and “prepare the patient for ongoing treatment of his/her drug dependence” (p.9). Later, under the same list of principles that fall under the program philosophy where harm reduction is listed, they include, “considering youth relapse not as a failure but as a part of recovery and an opportunity to learn” (p.27). This implies that abstinence is the end goal, which is in fundamental contrast to harm reduction. Throughout the document, there is a clear focus on working towards ending substance use, and substance use is only ever characterized as problematic.

4.1.4 Summary

Although the policy set for Nova Scotia is relatively large, with six current documents existing, the commitment to harm reduction remains weak. Of these six, only three documents address harm reduction to any degree. One of these applies narrowly to youth in withdrawal, and promotes a vague – often contradicted – conception of harm reduction in practice. The *Nova Scotia Strategy on HIV/AIDS[1]*, and its final report, can be considered the guiding documents on the provision of harm reduction services for the population. Despite a promising discussion around harm reduction and the identification of potential areas for improvement, the final review does little to endorse specific action items or address gaps identified earlier in the document. Overall, there is little policy direction to guide the implementation of harm reduction services in the province.

4.2 Current policy documents for Nova Scotia do not share the same understanding of a harm reduction approach.

In the six current policy documents that exist for Nova Scotia, only three actually include any discussion of a harm reduction approach. Although there is some consistency in these understandings, in that they tend to frame harm reduction as a means to prevent or reduce disease transmission, there is no standard definition. Furthermore, no agreement exists on what types of interventions should be endorsed as part of a harm reduction approach.

Together We Can: The plan to improve mental health and addiction care for Nova Scotians[4], and two associated update reports[5,6], include no mention of harm reduction or the seven interventions of interest. The original plan appears to endorse an approach quite contrary to harm reduction, often referring to outcomes such as “reducing relapse rates” (p.17) or “recovery” (p.16), and proposing solutions such as “structured treatment programs” (p.19) or “withdrawal management services” (p.18). This is notable as various harms associated with substance use are discussed in the document. For example, the “negative impacts of prescription drug abuse, including overdose and death: (p.7), or “tragic results” (p.18) for young Nova Scotians due to prescription drug abuse. Despite recognizing these harms, recommendations are always in-line with an abstinence based, treatment or recovery model. There is no discussion around reducing harms directly. The one possible nod to harm reduction is reference to long wait times for “opioid substitution programs”, unfortunately no further context is provided and there are no specific action items related to this intervention. Concerns around disease transmission are never noted as a potential harm. There is no link between discussions around substance use in this set of documents and in the remaining three documents.

The *Nova Scotia Adolescent Withdrawal Guidelines*[3] do acknowledge harm reduction, referring to it variously as an approach, framework and activities. In the document, harm reduction is not formally defined, nor is there a consistent framing of the approach. In some contexts it’s described as a part of treatment planning, in others a method of preventing STBBI transmission. For example, the document states that “harm reduction activities are mostly based on avoiding having one person’s blood coming into contact with another person’s blood” (p.117). However, earlier in the document, in a section promoting trauma-informed care, it states “within a harm reduction framework, treatment plans aim to create safety in the lives of youth and to empower them to make positive change” (p.58). On the same page, harm reduction is listed as a heading, under which it states, “harm reduction and minimizing risk are crucial in addressing the needs of youth”. The remainder of this paragraph talks about family involvement in treatment planning, and makes no mention of any interventions of interest. The

use of the term in this context is very unclear and does not appear to align with any recognized understandings of harm reduction.

Three interventions of interest are *noted* in this document, although only two (Narcan, Suboxone) are explicitly *promoted*. The third (needle exchange) is mentioned in a discussion of injection risk, but does not appear to be promoted in the context of these guidelines. Notably, within the document, Narcan and suboxone are never characterized as “harm reduction” interventions or approaches. Suboxone is endorsed in the context of ending substance use – by means of withdrawal and/or treatment. Narcan is recommended for youth who might overdose in withdrawal units. There is no further recognition of these interventions reducing harms for people who use substances, or playing a role in reducing harms otherwise. Overall, the use of the term harm reduction is very unclear and does not appear to align with any recognized understandings of harm reduction.

The final pair of documents both pertain to the same strategy, however, even within this context harm reduction is not characterized consistently. In the original document, *Nova Scotia’s Strategy on HIV/AIDS[1]*, harm reduction is generally discussed alongside prevention, and is framed as complimentary to the prevention of HIV/AIDS. It is formally defined as follows:

“Harm reduction is part of a public health approach addressing harmful behaviours that result in various “harms” or risks to individual and communities, including the spread of bloodborne pathogens. It places first priority on reducing the negative health, social, and economic consequences of the behaviour affecting the individual, community, and/or society, rather than on eliminating the behaviour. A key feature of services based on a harm reduction approach is the individual’s right to choose the place on a “continuum” that reflects degree of readiness or ability to reduce or eliminate the behaviour of concern. Any reduction in harm, no matter how small, is considered positive” (p.43).

This definition touches on several internationally recognized principles of harm reduction: acknowledging the significance of any positive change individuals make in their lives, and a focus on risk and harms (rather than stopping the behaviour) (HRI, 2010). It also recognizes the array of consequences that can result from harmful behaviors, although these are not addressed elsewhere in the report. Needle exchange is the only intervention of interest endorsed in this document, and harm reduction is consistently described as a means by which to reduce or prevent STBBI transmission.

The final update report of the strategy, *Review of Nova Scotia’s Strategy on HIV/AIDS: Looking Back and Moving Forward[2]*, also includes a formal definition. However, this one differs significantly from the earlier document in the policy set:

“Policies, programs, and practices that aim to reduce the negative health, social, and economic consequences (e.g., HIV, hepatitis B and C, overdoses) that may ensue from the use of legal and illegal psychoactive drugs without necessarily reducing or stopping drug use. Its cornerstones are public health, human rights, and social justice. It benefits people who use drugs, families, and communities. It ensures that people who use psychoactive substances are treated with respect and without stigma and that substance-related problems and issues are addressed systemically” (p. 59).

As with the original strategy, harm reduction is framed throughout as a means by which to prevent harms related to STBBI transmission. Although overdose is mentioned in the definition, this is the only recognition of harms beyond disease transmission, and it is never noted elsewhere in the document. This definition is more comprehensive, touching on human rights aspects of harm reduction, the issue of stigma, and recognizing both legal and illegal substances. Elsewhere in the document, needle exchange, outreach and low threshold methadone substitution are all discussed as interventions in the context of reducing disease transmission. The definition provided here has clearly evolved from the original strategy to endorse a more explicit understanding of harm reduction that incorporates additional internationally recognized principles. Both this definition, and the discussion of harm reduction in the original document, recognize that the behavior/drug use need not stop for harm to be reduced, various consequence can result from harmful behaviours, and that harm reduction can benefit more than just the individual. Beyond this, they share little in common, other than the framing of harm reduction as a means by which to prevent disease transmission.

4.2.1 Summary

Notably, the original HIV/AIDS Strategy[1] includes a comment on the lack of shared understanding of a harm reduction approach. It states, “consultations with stakeholders indicate that there is a clear need to foster a common understanding of a harm reduction approach among all partners in Nova Scotia” (p.15). Despite this assertion over ten years ago, it is clear from the above discussion that in looking at current documents across the province, a shared understanding of harm reduction does not exist in the policy set. The only similarity across conceptions of harm reduction, when it is noted at all, is its utility for preventing or reducing the transmission of HIV and other STBBIs. Documents do not share a formal definition, and needle exchange is the only intervention consistently identified across cases (three out of six documents). Overall, conceptions of the approach vary widely.

4.3 In comparing current to historical policy documents, the commitment to harm reduction in provincial policy has remained stagnant over the last decade.

Nova Scotia's Strategy on HIV/AIDS[1], and its final update report (*Review of Nova Scotia's Strategy on HIV/AIDS: Looking Back and Moving Forward*[2]) can be seen as the most influential series of policy documents in the province at the present time, in terms of their influence on harm reduction. These are the only documents that discuss harm reduction enough to illicit an understanding of the approach, are current, and apply to all people in the province (rather than the subset of adolescents).

In the original *Nova Scotia's Strategy on HIV/AIDS*[1], harm reduction is weakly defined and includes few specific action items for implementing harm reduction in practice. While some recommendations show potential for action, this commitment does not appear to have been upheld over time, as demonstrated by the *Final Report*[2]. For example, in the original strategy, one action calls for a "comprehensive prevention strategy that includes initiatives based on a harm reduction approach" targeted at different populations, and using a variety of interventions (p.38). Despite the promise of this statement, none of the seven policy recommendations outlined in the *Final Report*[2] explicitly address the expansion of harm reduction services, nor are any previously identified gaps addressed. In terms of a "comprehensive prevention strategy", there is little evidence to indicate this recommendation was fulfilled over time to include initiatives based on a harm reduction approach. Although harm reduction is explicitly defined in the latest document, including several important principles of harm reduction that were absent in the original strategy, this appears to be the only major evolution. Considering there are 11 years between the start and finish of the strategy, this lack of additional improvement is notable. Furthermore, some of the interim reports do mention other interventions of interest (safer inhalation kits, low threshold substitution), which is positive to see – yet these interventions do not make it to the final report at all and are not included in plans for “moving forward” with the plan.

The *Standards for Blood Borne Pathogens Prevention in Nova Scotia*[12] is now a historic document – which would have had the same influence (provincial, entire population) as the *HIV/Strategy*[1]. This document included a comprehensive definition of harm reduction, as well as listing numerous “principles of harm reduction” (p.10), agreed upon by stakeholders from across the province. Many of these align with key principles outlined by HRI (2010), including a non-judgmental approach that recognizes the respect and dignity of people who use drugs; focus on reducing harms; applicability to policies, programs and services; and acknowledgement of the social determinants of health and their impact on risk vulnerability and risk environments. Additionally, harm reduction was named as a “philosophical foundation” of the document, alongside the adoption of a population health approach. This

document only addressed two interventions of interest, syringe distribution and outreach. However, needle exchange is given extensive coverage throughout the document: it is one of four services for which component-specific standards have been developed; four pages of the document are dedicated to discussing the service. The endorsement of this intervention is very explicit.

4.3.1 Summary

The *Standards for Blood Borne Pathogens Prevention in Nova Scotia*[12] was published in 2004, a full ten years prior to the *Review of the Nova Scotia Strategy on HIV/AIDS*[2]. As such, one would expect the provincial commitment to harm reduction to strengthen over time, as additional evidence became available supporting the effectiveness of this approach elsewhere in Canada. Instead, very little has changed in this regard. While the current documents endorse one additional intervention of interest, harm reduction as a practice is more developed in the earlier document. It is not clear why this comprehensive understanding of harm reduction, one that aligns with internationally recognized principles, would not have been carried into future provincial-level policies.

4.4 Nova Scotia's policy documents demonstrate a strong commitment to monitoring and evaluation of policy initiatives.

In Nova Scotia, key provincial-level policy documents demonstrate a strong commitment to monitoring and evaluation, as evidenced by the consistent and frequent publication of update reports. Of the 12 documents in the Nova Scotia policy set, eight are considered to be update or reporting documents, comprising the majority of documents in the set by far.

The *Nova Scotia Strategy on HIV/AIDS*[1], which we identified as the key policy guiding harm reduction service implementation at the provincial level, has more update reports than any other singular document in the national corpus (of 102). Between 2003 and 2014, five update reports and one final review were published to monitor and evaluate progress of the original strategy over time. Each of the five update documents reports on progress over a specified time period, and discusses future directions based on this. Although harm reduction remains a minimal focus, this process reflects a responsive policy approach that appears open to adaptation in order to meet objectives. The final document reports on a review conducted by an independent consulting firm, which focused on obtaining “an overview of the actions, achievements, gaps, challenges and issues within the four strategic directions of the Strategy and identifying priorities and opportunities for future collaborative action and policy direction” (p.10). The outlined process is very comprehensive, including consultation with many

stakeholders, interviews, focus groups and a document review. The final report is critical of key initiatives outlined in the original strategy, demonstrating a high degree of accountability to the aims of the original plan. For example, governance and leadership successes and challenges faced during implementation were assessed. While roles and responsibilities were presented in the *2003 Strategy*[1], findings from the evaluation suggest a weak delineation of roles and responsibilities, and inadequate funding support from government. The Review's[2] recommendations address these governance and funding weaknesses by calling for a reassessment of roles and responsibilities, and increased government funding support directed at community based organizations and other stakeholders (p. 54). Overall, the existence of these reports, and the critical and comprehensive nature of the final report, demonstrate a strong commitment to implementation and follow through of policy aims.

Together We Can: The plan to improve mental health and addiction care for Nova Scotians[4], is another key provincial document that demonstrates this accountability. Although it is not to the same degree as the document set outlined above, this plan also has regular evaluation and reporting, which appear to be ongoing. Two reporting documents have been published since 2012, in 2013 and 2015. The first outlines implementation progress over the first year. Although only two new action items were suggested in this report, and both were quite vague, it does seem that the document is somewhat open to adjustment if evidence emerges to suggest that initiatives are not having the expected outcome. The second report is considerably less detailed, however, it does report that every action proposed in the original strategy is now completed, or work has at least begun on it, which is very positive to see in terms of commitment to policy implementation. Given this trend, it is likely that additional reports will be published over time, as the strategy is presently still in progress.

4.4.1 Summary

Although harm reduction is entirely absent from the second policy set described above, the existence of regular evaluation and reporting for these two key policy documents is promising to see. In both cases, reporting documents appear responsive to challenges and successes with policy implementation, and willing to adjust or reevaluate as necessary, in order to meet policy objectives. The commitment to evaluation, and particularly publishing these results – even when they indicate where policy has fallen short, is a key indicator of policy governance and a key feature of policy implementation.

5.0 Results: Deductive Analysis of Current Documents (Nova Scotia Policy Report Card)

All current documents were content analyzed using a deductive coding framework comprised of 17 indicators. These assessed the quality of policies relative to how well they described key *population* aspects (nine indicators) and *program* aspects (eight indicators) of a harm reduction approach. Each document was reviewed for the presence (1 = yes, criteria met) or absence (0 = no, criteria not met) of each quality indicator. Results are displayed in the following three tables.

Table 1: Presence of key population indicators in current policy documents

	Nova Scotia Adolescent Withdrawal Management	Nova Scotia Adolescent Withdrawal Management	Nova Scotia Adolescent Withdrawal Management	Nova Scotia's Strategy on HIV/AIDS	Review of NS Strategy on HIV/AIDS: Looking Back and Moving Forward	Total (out of 4)
[1] Does the document recognize that stigma and/or discrimination are issues faced by people who use drugs or have drug problems?	1	1	0	1	3	
[2] Does the document affirm that people who use substances need to be involved in policy development or implementation?	0	0	1	0	1	
[3] Does the document acknowledge that not all substance use is problematic?	0	0	0	0	0	
[4] Does the document recognize that harm reduction has benefits for both people who use drugs and the broader community?	0	0	1	1	2	
[5] Does the document acknowledge that harm reduction can be applied to the general population?	0	0	1	0	1	

[6] Does the document target women in the context of harm reduction?	0	0	0	1	1
[7] Does the document target youth in the context of harm reduction?	0	1	0	1	2
[8] Does the document target indigenous populations in the context of harm reduction?	0	0	0	1	1
[9] Does the document target LGBTQI populations in the context of harm reduction?	0	0	0	1	1
TOTAL (out of 9)	1	2	3	6	12/36

Table 2: Presence of key program indicators in current policy documents

	Nova Scotians	Together We Can: The plan to improve mental health and addiction care for Nova Scotians	Management	Withdrawal	Nova Scotia Adolescent	Nova Scotia's Strategy on HIV/AIDS	Review of NS Strategy on HIV/AIDS: Looking Back and Moving Forward	Total (out of 4)
[10] Does the document acknowledge the need for evidence-informed policies and/or programming?	1		0	0	0	0	1	
[11] Does the document acknowledge the importance of preventing drug related harm, rather than just preventing drug use or blood borne or sexually transmitted infections?	0		0	1	1	1	2	
[12] Does the document discuss low threshold approaches to service provision?	0		1	0	1	1	2	

[13] Does the document specifically address overdose?	1	1	0	1	3
[14] Does the document recognize that reducing or abstaining from substance use is not required under a harm reduction approach?	0	0	1	1	2
[15] Does the document consider harm reduction approaches for a variety of drugs and modes of use?	0	0	0	0	0
[16] Does the document address human rights (e.g. dignity, autonomy) concerns of harm reduction?	0	0	0	1	1
[17] Does the document consider social determinants (i.e. income, housing, education) that influence drug-related harm?	0	0	0	0	0
TOTAL (out of 8)	2	2	2	5	11/32

Table 3: Proportion of policy quality indicators endorsed for all documents within cases

Case	Target population quality (out of 9 indicators)	Service quality (out of 8 indicators)
British Columbia (10)	38/90 (42%)	52/80 (65%)
Alberta (4)	7/36 (19%)	14/32 (44%)
Saskatchewan (3)	9/27 (33%)	13/24 (54%)
Manitoba (7)	10/63 (16%)	19/56 (34%)
Ontario (7)	3/63 (5%)	9/56 (16%)
Quebec (11)	24/99 (24%)	26/88 (30%)
New Brunswick (1)	0/9 (0%)	1/8 (13%)
Nova Scotia (4)	12/36 (33%)	11/32 (34%)
Prince Edward Island (1)	0/9 (0%)	1/8 (13%)
Newfoundland (2)	1/18 (6%)	1/16 (6%)
Yukon (0)	n/a	n/a
North West Territories (2)	2/18 (11%)	1/16 (6%)
Nunavut (2)	3/18 (17%)	5/16 (31%)
Canada (54)	109/486 (22%)	153/432 (35%)

6.0 Conclusion

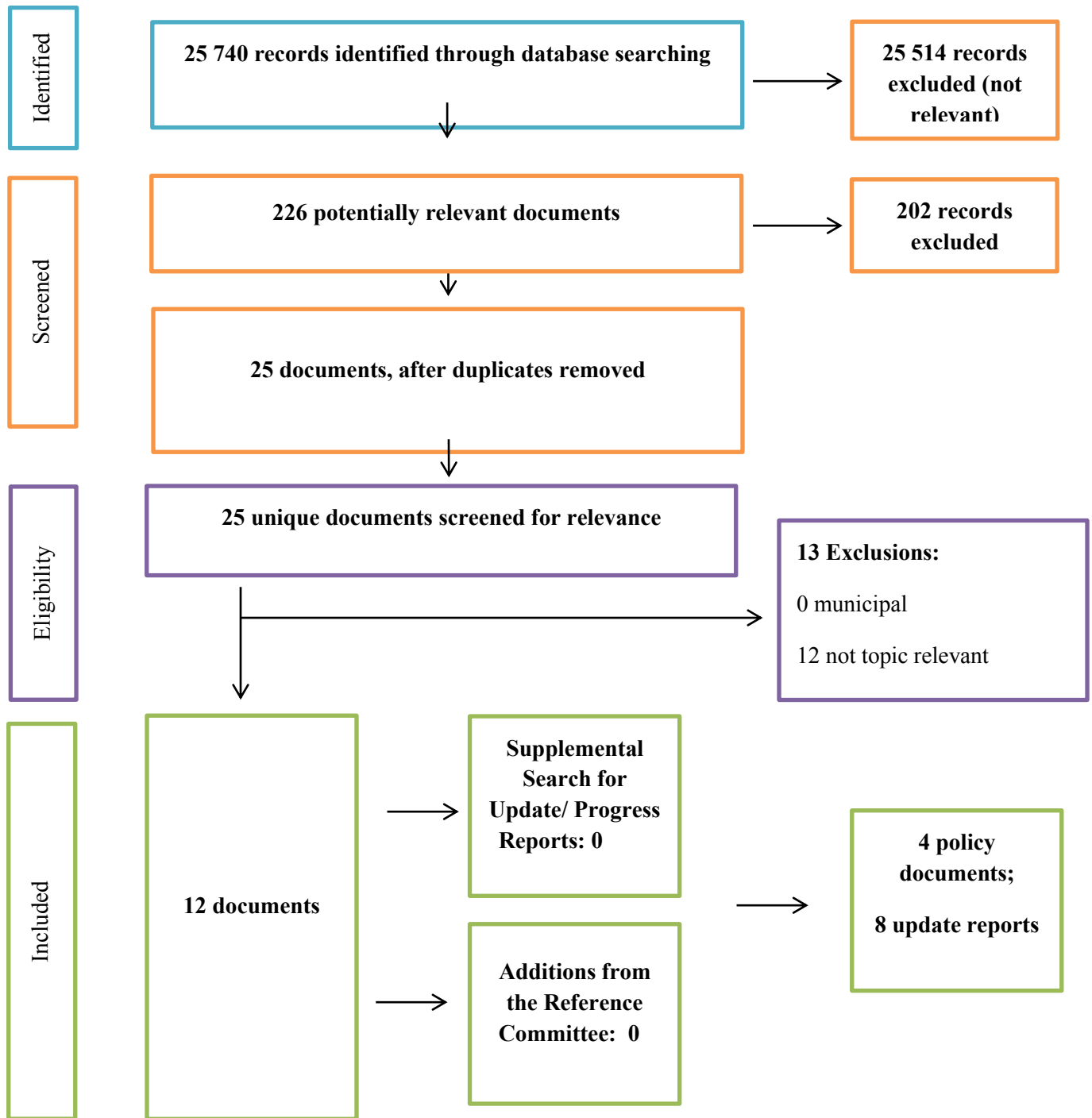
The policy set for Nova Scotia is relatively large, consisting of 12 documents in total. Only six of these are considered current, and of these, only three address harm reduction to any degree. One document applies specifically to youth in withdrawal, and promotes a vague – often contradicted – conception of harm reduction in practice. The remaining two documents - Nova Scotia's Strategy on HIV/AIDS, and its final report, are the primary guiding documents for the provision of harm reduction services for the population. Despite a promising discussion around harm reduction and the identification of key areas for improvement, the final review does little to endorse specific action items for future implementation. Across the policy framework, syringe distribution, outreach and low threshold opioid substitution are the only interventions endorsed at the provincial-population level. Overall, there is limited policy direction to guide the implementation of harm reduction services in the region. Despite these shortcomings, when compared to other jurisdictions in the province, Nova Scotia remains one of the highest quality harm reduction policy sets.

Current policy documents do not characterize harm reduction the same way, shedding light on differences in how the approach is understood by various stakeholders across time. Between the three documents that address harm reduction, the only consistent feature is that harm reduction is characterized as a means by which to prevent disease transmission. Interventions are not considered for modes of use outside of injection, and syringe distribution is the only intervention endorsed consistently. Although additional harms are noted, the risk of disease transmission is consistently emphasized as the primary harm to prevent. Other than this, descriptions of harm reduction highlight very different key principles of the approach.

The existence of six historical documents, in addition to the six current documents, allows for shifts in policy over time to be accounted for. Notably, in provincial policy, the commitment has remained stagnant over time. The definition of harm reduction endorsed in policy has evolved to align with more internationally recognized principles of harm reduction. However, in terms of explicit policy commitments, little has improved over the decade.

A key strength of the Nova Scotia policy set is the strong commitment to monitoring and evaluation, evidenced by eight distinct update or reporting documents. The commitment to evaluation is a key indicator of policy governance and a key feature of policy implementation. This is promising to see, as future policies that endorse harm reduction more explicitly would be well situated for implementation in this policy context.

Appendix A: Systematic search strategy flow diagram⁷



⁷ Adapted from PRISMA 2009 Flow Chart (Moher, Liberati, Tetzlaff, Altman, The PRISMA Group, 2009).

Appendix B: Standard methodology for generating provincial/territorial case report

Overview

A separate paper (Wild et al., 2017) describes the search and verification strategies used to assemble a corpus of harm reduction policy texts for each case. All policy documents meeting inclusion criteria were coded into one of three categories: (1) primary documents (i.e., policy texts that direct harm reduction services or resources as their main named purpose), (2) secondary documents (i.e., policy texts that direct services and resources that relate to harm reduction, and for which harm reduction is embedded throughout the document [e.g., as part of an addiction strategy or as part of an HIV/AIDS policy framework]), and (3) tertiary documents (i.e., policy texts that direct services and resources that relate to harm reduction but do not mention harm reduction explicitly).

Documents were analyzed in a two-step process, involving inductive and deductive methods. The inductive analysis was designed to provide a synthesis of *current and historical* developments in harm reduction policy for the case. The deductive analysis was designed to facilitate cross-case comparisons, and involved evaluating *current* policy documents for each case in relation to the CHARPP framework – a set of 17 indicators assessing the quality of harm reduction policies.

Inductive analysis

The qualitative analysis proceeded in three phases for each relevant policy document. First, each document was reviewed for relevant text (i.e. text directly or indirectly relating to the provision of harm reduction services in the given provincial/territorial jurisdiction). Relevant sections were then excerpted into word processing software. Each excerpt was then analyzed using a modified version of Mayan's (2009) latent content analysis procedure and analytic notes were generated. The focus of the analytic notes was primarily descriptive and instrumental (i.e., generating a deeper understanding of the intent and purpose of the policy document and the relevant stakeholders and their roles).

Next, each document's analytic notes and accompanying quantitative data (see next page) were synthesized and compiled into a narrative document description. Combining the quantitative and qualitative data at this stage was useful for two reasons; (1) quantitative data presented at the start of each document description provided a quick means to compare across documents in each case; and 2) presenting the quantitative data at the start of the synthesis facilitated review of the analytic notes to ensure that they contained adequate qualitative information to contextualize each quantitative data point. For example, if the quantitative data indicated that there is mention of funding mechanisms in the report, than the analyst reviewed their analytic notes and ensured this funding commitment is adequately described in the narrative synthesis. This narrative description provided an overview of current and historical developments in provincial/territorial harm reduction policymaking. The length of the narrative descriptions vary considerably depending on whether a given document is primary, secondary or tertiary, as well as whether it is shorter or longer and simple or complex.

Finally, the narrative document descriptions were synthesized and compiled. Descriptive comments summarized the overall scale and scope of the documents contained in each case, and described the main features of the set of policy documents. Particular attention

was paid to identifying points of convergence and divergence within and between policy documents.

Deductive analysis

To facilitate cross-case comparison between the policy documents of each province and territory, we developed the CHARPP framework – a set of 17 indicators that assessed the quality of policies based on how well they described key *population characteristics* and *program features* of a harm reduction approach. The indicators were guided by principles outlined by the International Harm Reduction Association (2010) and developed in consultation with a working group of harm reduction experts from across Canada.

Nine *population* indicators were specified, based on the premise that high-quality harm reduction policies characterize service populations accurately when they: (1) recognize that stigma and discrimination are issues faced by people who use illegal drugs; (2) affirm that people who use drugs need to be involved in policy development or implementation; (3) acknowledge that not all substance use is problematic; (4) recognize that harm reduction has benefits for both people who use drugs and the broader community; (5) acknowledge that a harm reduction approach can be applied to the general population; and affirm that (6) women; (7) youth; (8) indigenous peoples; and (9) LGBTQI (lesbian, gay, bisexual, trans, queer and questioning, and intersex) people are key populations for harm reduction.

Eight *program* indicators were specified based on the premise that high-quality harm reduction policies should (10) acknowledge the need for evidence-informed policies and/or programs; (11) recognize the importance of preventing drug-related harm (rather than just preventing drug use, or blood-borne or sexually-transmitted infections); (12) discuss low-threshold [49] approaches to service provision; (13) specifically address overdose; (14) recognize that reducing or abstaining from substance use is not required; (15) consider harm reduction approaches for a variety of drugs and modes of use; (16) discuss harm reduction's human rights (e.g. dignity, autonomy) dimensions; and (17) consider social determinants (including income, housing, education) that influence drug-related harm.

Each document was reviewed for the presence (1 = yes, criteria met) or absence (0 = no, criteria not met) of each quality indicator. Dichotomous scores for each indicator were justified with an accompanying written rationale. Scores and rationales were then compiled into a standardized *policy report card* for each provincial or territorial case to facilitate comparisons of harm reduction policy across jurisdictions. Formal policies that score highly on CHARPP indicators are high-quality because they conceptualize and describe a harm reduction approach in close accordance with its internationally-recognized attributes and principles. Conversely, poor-quality harm reduction policies score low on CHARPP indicators because they refer to the approach only sparingly, and/or do not elucidate its key attribute and principles.

Accompanying Quantitative Data

- Author(s);
- Year published;
- Number of years the policy covers;
- Page length of the document;
- Triage level (primary, secondary, tertiary);
- Number of distinct mentions of the term 'harm reduction' as well as each of the 7 specific harm reduction services described earlier;
- Language used (i.e. 'harm reduction', 'reducing harm', 'risk reduction');
- Policy level (provincial or regional health authority);
- Scope/target population (entire population, specific target population);
 - Specify target population: (i.e. Aboriginal communities, rural communities, health region);
- Population size of target population;
- Timeline for the policy provided? (yes/no);
 - Specify timeline: (i.e. 3-year plan, 5-year plan)
- Evidence of endorsement from Premier or other member of Cabinet? (yes/no);
- Any reference to legislation enacted to support policy implementation? (yes, no);
 - Specify name of Act or Statute
- Does the document assign specific roles and responsibilities to relevant actors? (yes/no);
- Does the document mention funding mechanisms and/or commitments? (yes/no)
- Does the document have regular progress reporting or updates? (yes/no)
 - Names and date of progress reports or updates
- Does the document have any progress reporting or updates?
- Reference to consultations with target population during policy development?

Appendix C: Descriptive summary of current policy documents

Together We Can: The plan to improve mental health and addiction care for Nova Scotians

Together We Can is Nova Scotia's first mental health and addiction strategy, and outlines the government's plan to improve the mental health and well-being of those living in the province. The document was authored by the Government of Nova Scotia in 2012, and intended to be implemented over a five year period, with frequent update reports. The document includes a three-year timeline, arranged by individual actions associated with five priority areas: 1) intervening and treating early for better results, 2) shorter waits, better care, 3) aboriginal and diverse communities, 4) working together differently and 5) reducing stigma. The document focuses on mental health and addictions, and specifically references various concerns associated with substance use. However, harm reduction or any of the seven interventions of interest are not mentioned.

Nova Scotia Adolescent Withdrawal Management Guidelines

The *Nova Scotia Adolescent Withdrawal Guidelines* was published in 2013 by the Government of Nova Scotia. The document was adapted from YSAS Clinical Practice Guidelines from Australia, and was produced in response to a formal call for provincial guidelines, from the Provincial Adolescent Withdrawal Management Working Group. A subcommittee of this group was formed, and other experts consulted to adapt the Australian document – taking into consideration suggestions from the working group, related literature, and youth stakeholder meetings. The document is comprehensive, and cover many facets of working with youth in this context. In terms of harm reduction, the discussion is very limited, and it is unclear how the document understands this approach. Suboxone is the only intervention “endorsed”, although naran and needle distribution are mentioned in other contexts. The target population of this document is youth only.

Nova Scotia's Strategy on HIV/AIDS

Nova Scotia's Strategy on HIV/AIDS is a provincial level policy document published by the Provincial HIV/AIDS Strategy Steering Committee, a commission convened by the government of Nova Scotia. Published in 2003, this document presents a provincial strategy, with 19 recommended actions to address the incidence and prevalence of HIV/AIDS. The strategy is designed to be implemented over multiple phases. The strategy has no end date, making it a current policy document. In addition, even though harm reduction is not the main focus of the document, it is mentioned throughout the document and identified as one of the document's strategic areas of action. Syringe distribution is the only intervention of interest endorsed.

Review of Nova Scotia's Strategy on HIV/AIDS

The *Review of Nova Scotia's Strategy on HIV/AIDS: Looking Back & Moving Forward* was published in 2014 by the Nova Scotia Advisory Commission on AIDS. This review sought to evaluate the implementation and outcomes of *Nova Scotia's Strategy on HIV/AIDS*, and provide recommendations to the Commission, the government of Nova Scotia and other stakeholders as they prepare to revise the 2003 Strategy. The Review evaluated the Strategy's implementation between 2003 and 2012. It engaged stakeholders (provincial and federal officials and service providers) in data collection, and reviewed data from related research projects and the Strategy's annual updates published between 2005 and 2010. Overall, the Review illustrates the state of the health system's response to HIV/AIDS and recommended actions for stakeholders to explore in the future as they renew the Strategy.

The evaluation's findings describe successes and challenges of the Strategy's implementation faced by stakeholders between 2003 and 2012, and present a summary of the state of HIV/AIDS policy and programming in Nova Scotia. It is evident from the evaluation findings that harm reduction services (needle exchange, low threshold MMT, mobile outreach) have been an integral component of the health system's response to HIV/AIDS prevention. An assessment of service gaps made clear that further expansion of harm reduction services were required to meet needs of PHAs and vulnerable populations, resulting in the identification of the expansion of needle exchange as one of a number of priority actions for the future. Despite this assessment and prioritization of harm reduction, there is minimal mention of harm reduction in the Review's seven recommendations. It is endorsed in one recommendation only, and no specific interventions are included here. Elsewhere in the document, needle exchange, low threshold MMT, and outreach are noted.

References

- AIDS Coalition of Nova Scotia. (2015). Annual Report: 2014-2015. Retrieved from <http://www.acns.ns.ca/annual-reports/24-annual-report-2014-2015/file.html>.
- Asbridge, M., & Langille, D. (2013). 2012 Nova Scotia Student Drug Use Survey: Technical Report. Retrieved from <http://novascotia.ca/dhw/publications/Student-Drug-Use-Survey-Report.pdf>
- Black, S., Simon, P., & Gilbert, R. (2012). Halifax Regional Municipality Drug Use Report 2012. *Canadian Community Epidemiology Network on Drug Use*. Retrieved from http://web.unbc.ca/~simonp/CCENDU/Halifax_CCENDU_Report_2012.pdf.
- Bradley, S. (2015). Evolve music festival making changes to improve safety - Nova Scotia - CBC News. Retrieved November 30, 2016, from <http://www.cbc.ca/news/canada/nova-scotia/antigonish-evolve-concert-doctor-safety-changes-1.3373266>
- Burbridge, A. M. M., & Campbell, M. A. (2012). *Evaluating Methadone Maintenance Treatment Outcomes in an Atlantic Canadian Milieu* (Doctoral dissertation, University of New Brunswick, Department of Psychology).
- Canadian Center on Substance Abuse. (2013). Deaths Involving Fentanyl in Canada, 2009-2014. [Bulletin]. Toronto, ON. Retrieved November 2, 2016 from <http://www.ccsa.ca/Resource%20Library/CCSA-CCENDU-Fentanyl-Deaths-Canada-Bulletin-2015-en.pdf>
- Cavaleri, W & Riley, D. (2012). "Harm Reduction in Canada: The Many Faces of Regression". In R. Pates & D. Riley (Eds.), *Harm Reduction in Substance Use and High-Risk Behaviour: International Policy and Practice*. Oxford, UK: Wiley-Blackwell.
- CBC News. (2013). Demand surges at Halifax needle exchange - Nova Scotia - CBC News. Retrieved December 01, 2016, from <http://www.cbc.ca/news/canada/nova-scotia/demand-surges-at-halifax-needle-exchange-1.1386198>
- CBC News. (2015). Evolve Festival cancels drug-testing kits in insurance scuffle - Nova Scotia - CBC News. Retrieved December 01, 2016, from <http://www.cbc.ca/news/canada/nova-scotia/evolve-festival-cancels-drug-testing-kits-in-insurance-scuffle-1.3142653>
- Chiu, E. (2016). Mainline Needle Exchange hands out more needles but rations some supplies - Nova Scotia - CBC News. Retrieved December 05, 2016, from <http://www.cbc.ca/news/canada/nova-scotia/mainline-funding-supplies-rationed-1.3752592>
- College of Physicians and Surgeons of Nova Scotia. (2012). CPSNS Methadone Maintenance Treatment Handbook. Retrieved from <https://www.cpsns.ns.ca/Portals/0/PDFprograms/Methadone%20Maintenance%20Treatment%20Handbook.pdf>

Department of Health and Wellness. (2015). Annual Statement of Mandate for the Fiscal Year 2014-2015. Retrieved from http://novascotia.ca/dhw/corporate-reports/documents/DHW_Statement_of_Mandate_for_2014-2015.pdf

Direction180. (2016). HOME - Direction180. Retrieved December 05, 2016, from <http://www.direction180.ca/>

Dooley, J., Asbridge, M., Fraser, J., & Kirkland, S. (2012). Physicians' attitudes towards office-based delivery of methadone maintenance therapy: results from a cross-sectional survey of Nova Scotia primary-care physicians. *Harm Reduction Journal*, 9: 20-29.

Gahagan, J., Fuller, J., Delpech, V., Baxter, L., & Proctor-Simms, E. (2010). HIV counselling and testing in Nova Scotia: the provincial strategy in the context of an international debate. *Canadian Journal Of Public Health*, 101(4), 300-302.

Institute of Public Administration of Canada. Healthcare Governance Models in Canada A Provincial Perspective Pre-Summit Discussion Paper. (2013). Retrieved November 2, 2016 from The Institute of Public Administration of Canada website: www.ipac.ca/documents/ALL-COMBINED.pdf

International Harm Reduction Association (HRI). (2010). What is harm reduction? A position statement from Harm Reduction International. London, UK: International Harm Reduction Association.

Kirkland, S., Gahagan, J., Dykeman, M., Mugford, J., Jackson, L., Sketris, I., Peltekian, K.,.... & Peddle, S. (2006). HIV/AIDS and Hepatitis C: A Scan of Policies, Programs, and Research in Atlantic Canada. Atlantic Interdisciplinary Research Network for Social and Behavioural Issues in Hepatitis C and HIV/AIDS. Retrieved from http://www.med.mun.ca/getdoc/beb4b9c6-72e4-4e66-ac24-1eab92856229/AIRN_Scan.aspx

Kirkland, S., Ploem, C., & Dikaios, K. (2016). Program Evaluation for Mainlines Needle Exchange: Contributing to a Harm Reduction Landscape in Nova Scotia. The Atlantic Interdisciplinary Research Network For Social and Behavioural Issues in Hepatitis C and HIV. Retrieved from <http://www.med.mun.ca/CMSPages/GetFile.aspx?nodeguid=21bf4c32-b1ce-4176-83fb-983961442fb0&lang=en-CA>

Klein A (2007). Sticking Points: Barriers to Access to Needle and Syringe Programs in Canada. Toronto: Canadian HIV/AIDS Legal Network. Retrieved from <http://librarypdf.catie.ca/PDF/P48/stickingpoints.pdf>

Knox, J. (2015). Nova Scotia Health Authority. Retrieved December 05, 2016, from <http://www.nshealth.ca/healthiertogether>

Ling S. (2013). Trend Analysis on Drug-Related Deaths in Nova Scotia: A Study on Prescription and Illicit Drugs. *Canadian Journal Of Addiction Medicine* 4(1): 11-17.

Logan, N. (2013). Liberals win majority government in Nova Scotia. Retrieved December 05, 2016, from <http://globalnews.ca/news/890432/global-news-calls-liberal-government-for-nova-scotia/>

Luce, J. (2011). A Cross-Canada Scan of Methadone Maintenance Treatment Policy Developments: A Report Prepared for the Canadian Executive Council on Addictions. Canadian Executive Council on Addictions. Retrieved November 03, 2016 from <http://www.ceca-ccect.ca/pdf/CECA%20MMT%20Policy%20Scan%20April%202011.pdf>

Mainline. (2016). Retrieved December 01, 2016, from <http://mainlineneedleexchange.ca/>

Mayan, M. (2009). Essentials of qualitative research. Walnut Creek, CA: Left Coast Press.

Mi'kmaw Native Friendship Centre. (2016). MNFC Programs. Retrieved December 01, 2016, from <http://www.mymnfc.com/programs.php>

Nova Scotia Health Authority. (2015). Retrieved November 30, 2016, from <http://novascotia.ca/dhw/about/nova-scotia-health-authority.asp>

Nova Scotia Prescription Monitoring Program. (2016). Welcome to the Nova Scotia Prescription Monitoring Program. Retrieved December 01, 2016, from <http://nspmp.ca/>

Nova Scotia Health Authority. (2016). NSHA Fact Sheet. Retrieved December 05, 2016, from <http://www.nshealth.ca/nsha-fact-sheet>

Parker, J., Jackson, L., Dykeman, M., Gahagan, J., & Karabanow, J. (2012). Access to harm reduction services in Atlantic Canada: Implications for non-urban residents who inject drugs. *Health & Place*, 18 (2), 152-162.

Patten, S. (2006). Environmental Scan of Injection Drug Use, Related Infectious Diseases, High-risk Behaviours, and Relevant Programming in Atlantic Canada. The Public Health Agency of Canada, Atlantic Regional Office. Retrieved from http://www.catie.ca/sites/default/files/_sites_webphac_htdocs_archives_es-Injection_Drug_Use_e.pdf

Popova, S., Rehm, J., & Fischer, B. (2006). An overview of illegal opioid use and health services utilization in Canada. *Public Health*, 120(4), 320-328.

Provincial HIV/AIDS Strategy Steering Committee. (2003). Nova Scotia's Strategy on HIV/AIDS: Summary Report. Retrieved from <https://www.novascotia.ca/aids/documents/HIV-AIDS%20Stratgy-Full%20Report.pdf>

Roberts, Rob. (2016). *Spike in Nova Scotia opioid deaths raises fears of B.C.-style crisis*. The Star. Retrieved from <https://www.thestar.com/news/canada/2016/10/21/spike-in-nova-scotia-oidium-deaths-raises-fears-of-bc-style-crisis.html>

Statistics Canada. (2012). Focus on Geography Series, 2011 Census. Statistics Canada Catalogue no. 98-310-XWE2011004. Ottawa, Ontario. Analytical products, 2011 Census. Last updated October 24, 2012. Retrieved from <http://www12.statcan.gc.ca/census-recensement/2011/as-sa/fogs-spg/Facts-pr-eng.cfm?Lang=Eng&GC=12>.

Statistics Canada. (2012). Canadian Alcohol and Drug Use Monitoring Survey. Table 2: Main 2011 CADUMS indicators by province – Drugs. Retrieved from http://www.hc-sc.gc.ca/hc-ps/drugs-drogues/stat/_2011/tables-tableaux-eng.php#t2

Statistics Canada. (2014). Canadian Alcohol and Drug Use Monitoring Survey. Table 2: Main 2012 CADUMS indicators by province – Drugs. Retrieved from http://www.hc-sc.gc.ca/hc-ps/drugs-drogues/stat/_2012/tables-tableaux-eng.php#t2.

Ward, R. (2016). Nova Scotia health minister considers more funding for Direction 180 - Nova Scotia - CBC News. Retrieved December 05, 2016, from <http://www.cbc.ca/news/canada/nova-scotia/direction-180-health-minister-funding-1.3506640>

Wild, T. C., Pauly, B., Belle-Isle, L., Cavalieri, W., Elliott, R., Strike, C., ... & Hyshka, E. (2017). Canadian harm reduction policies: A comparative content analysis of provincial and territorial documents, 2000–2015. *International Journal of Drug Policy*, 45, 9-17.

World Health Organization (WHO). 2014. *Consolidated guidelines on HIV prevention, diagnosis, treatment, and care for key populations*. Geneva, Switzerland.