Hepatitis C Situational Assessment

Summary Report

Situational Assessment
Southwestern Public Health
Last Updated: 2024-02-13

Hepatitis C Situational Assessment

What is the Situation?

Phase 1: Indicator table

Using epidemiological data from your indicator table, write a paragraph describing the overall health status of your population as it relates to this program or topic area. Identify indicators and population subgroups that show statistically significant or clinically relevant differences from their age/sex counterparts, Ontario and/or our peer group.

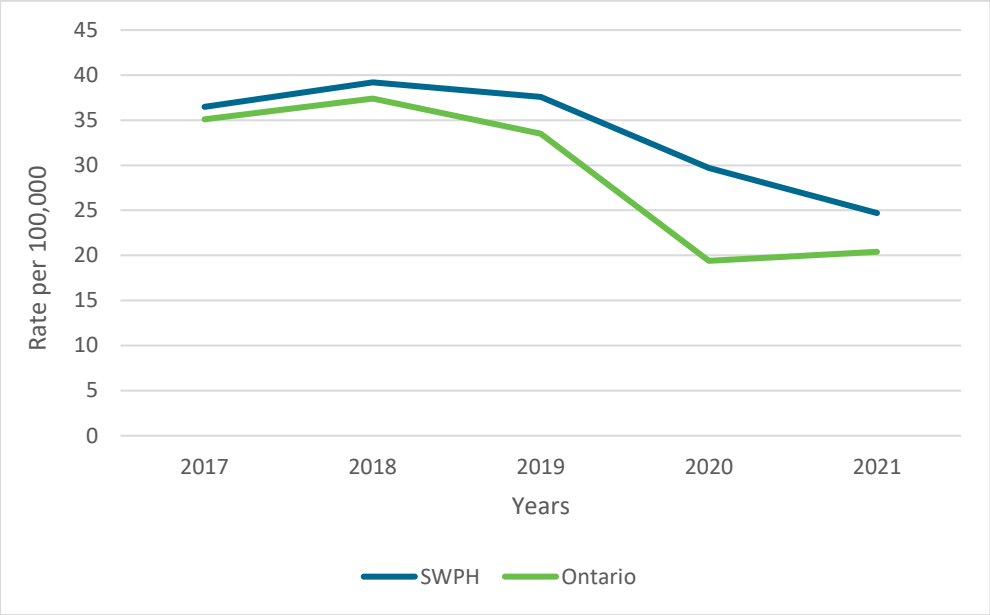
The rate of hepatitis C has been declining in Ontario and the Southwestern Public Health (SWPH) region since 2017. However, during this time, the SWPH region still had relatively higher rates of hepatitis C than Ontario. Within the SWPH region, males have had higher rates of hepatitis C than females since 2017.

Based on your summary, what is the most significant health concern in this program or topic area (hint: check the key messages document)? Which subgroup(s) is/are experiencing this health concern? Which indicator have you decided to move forward with to complete the next phases of the situational assessment?

Even though data appears to show hepatitis C has been on a downward trend since 2017, we feel strongly that the pandemic likely led to underreporting from 2020-2022. During this time, many people were unable or were limited by their ability to visit health services for testing and/or treatment. Therefore, it is still important to address this local population health need.

The indicator we chose to move forward with into phase two of the situational assessment was the incidence of hepatitis C for all ages and sexes (Figure 1). In the next phase, we explored the risk and protective factors that affect the incidence of hepatitis C in the SWPH region.

Figure 1. Hepatitis C rates, Ontario and SWPH, all sexes, all ages



What is Influencing the Situation?

Phase 2a: Force field analysis

Using the results from your force field analysis, summarize (in a few sentences for each level) the public policy, community, organizational, interpersonal, and individual factors that are making the situation above better or worse (i.e. protective and risk factors).

See Table 1 for the results of phases 2a and 2b.

The majority of the risk or protective factors were found at the individual level. Risk factors at this level include, among other things, sharing drug paraphernalia,[1] sharing personal care items,[1] people who have HIV[2] and people engaging in unprotected sex involving blood contact with someone who has hepatitis C.[1] Protective factors at this level included routine testing in primary care for people with recognized conditions, exposures or ongoing risk factors[3,4] and direct-acting antiviral treatment.[5] Contact tracing is a protective factor at the interpersonal level.[4]

Protective factors at the organizational level were related to hepatitis C education programs for practitioners providing health and social services to people at increased risk for acquiring hepatitis C[4] and implementing hepatitis C testing at various institutions (e.g. immigration removal centres, drug services centres and sexual health clinic services clinics).[4] A risk factor at the organizational level included using unsterile equipment in healthcare settings.[2]

Community-level protective factors include local and national hepatitis C awareness campaigns and sessions[4] and point-of-care testing at treatment centres.[6] A risk factor at the community level is people who were born or live(d) in a region where hepatitis C is widespread.[1] At the public policy level, protective factors include universal screening for all adults (18-79 years)[3,7] and pregnant adults during each pregnancy.[3]

Phase 2b: Environmental scan

Based on the results of your environmental scan, which factors from your force field analysis are not being adequately addressed by existing initiatives?

The force field analysis revealed many risk and protective factors concerning hepatitis C infection. Many of the factors identified were either individual, organizational or community factors. However, the public policy factors we identified (i.e. universal screening) are of most interest to our organization, as they would allow us to reach a greater proportion of the most vulnerable populations.

Decision

For the next phase, we completed a literature review to gain a better understanding of evidence-informed interventions that are able to address the public policy, community, organizational and some individual-level risk and protective factors we identified in our force field analysis.

Table 1. Force field analysis and environmental scan

Level of Influence	Protective Factors	Risk Factors	Existing Interventions in SWPH Region
Public Policy	Universal screening for adults aged 18-79 years[3,7]	N/A	
Public Policy	Universal screening for all pregnant adults during each pregnancy[3]	N/A	
Community	Local hepatitis C awareness-raising campaign for people at-risk [4]	N/A	
Community	National hepatitis C awareness-raising campaign for people at-risk[4]	N/A	National Aboriginal Hepatitis C Awareness Month **(Pauuktuutut Inuit Women of Canada)** World Hepatitis Day **(World Hepatitis Alliance)**
Community	Hepatitis C testing at awareness-raising sessions[4]	N/A	
Community	Point-of-care hepatitis C RNA nucleic acid testing at treatment sites[6]	N/A	
Community	N/A	Born or live in a region where hepatitis C is widespread[1]	
Organizational	Education program for professionals providing health and social services for people at increased risk of hepatitis C infection (e.g. people who inject drugs)[4]	N/A	
Organizational	Hepatitis C testing in prisons and immigration removal centres[4]	N/A	
Organizational	Hepatitis C Testing in drug services centres[4]	N/A	
Organizational	Hepatitis C Testing in sexual health services clinics[4]	N/A	Hepatitis C testing **(SWPH Sexual Health Team)**
Organizational	N/A	Unsterile equipment in healthcare settings[2]	Education and inspections **(SWPH IPAC HUB)**
Interpersonal	Contact tracing[4]	N/A	Infectious diseases case investigations **(SWPH Sexual Health Team)**
Individual	Testing in primary care[4]	N/A	Medical appointment, hepatitis C testing **(Family physician clinic)**

Individual	Testing for people with recognized conditions or exposures[3]	N/A	
Individual	Routine periodic testing for persons with ongoing risk factors[3]	N/A	
Individual	Opioid substitution therapy[8]	N/A	Suboxone therapy **(Rapid Access Addiction Medicine)** Methadone and suboxone therapy **(Oxford Recovery Clinic)** Methadone and suboxone therapy **(Clinic 461)**
Individual	N/A	Sharing contaminated drug paraphernalia[1]	Needle exchange program **(SWPH Sexual Health Team)** Mobile needle exchange program **(RHAC, CMHA)**
Individual	N/A	Receive body services that use unclean tools or work practices[1]	Personal services settings compliance inspections **(SWPH Environmental Health Team)** Social media posts re: risks associated with invasive devices **(SWPH Environmental Health Team)**
Individual	N/A	Share personal care items with someone with hepatitis C[1]	
Individual	N/A	Unprotected sex involving blood contact with someone who has hepatitis C[1]	
Individual	N/A	People with HIV[2,9]	Outreach **(Regional HIV/Aids Connection)** Counselling **(Regional HIV/Aids Connection)**
Individual	N/A	HIV-positive men who have sex with men[4]	Poz Prevention **(Regional HIV/Aids Connection)**
Individual	N/A	Mother-to-child or vertical transmission[1,9]	
Individual	N/A	Aboriginal Peoples[9]	
Individual	N/A	People who inject drugs[4,9]	
Individual	N/A	People who received a blood transfusion before 1991[4]	
Individual	N/A	Incarcerated peoples, including young offenders[4,9]	
Individual	N/A	People living in hostels for the homeless or sleeping on the streets[4]	

How do we Address the Situation?

Phase 3: Finding Interventions

Using the results of your literature review from your Evidence Synthesis, identify the best practices (including suggested target audiences) to address each of the factors not being adequately addressed by existing initiatives.

At the population health level, screening all adults and all pregnant adults for hepatitis C can limit transmission of the disease.[3,7] Specific interventions, such as EMR alerts, are effective at increasing screening rates in eligible cohorts. A systematic review outlined several studies where logic in EMRs were customized so that primary care professionals providing services to specific patients (e.g. at-risk infants born to infected mothers, baby boomers, specific ethnicities, non-English speaking populations, patients receiving specific therapies, etc.) receive automatic EMR alerts or reminders for hepatitis C testing when treating or performing certain actions with these patients (e.g. HCV exposure added to problem list on infant EMR record, at time of requesting any lab blood test, when adding HCV exposure to problem list, etc.).[10]

At the community level, point-of-care testing and simplified hepatitis C service delivery (i.e. decentralization of services, integrated service delivery, task sharing) is effective at increasing hepatitis C treatment uptake. There is low-to-moderate evidence for point-of-care hepatitis C viral load testing instead of laboratory testing. This form of blood testing is completed on-site, close to where clients are receiving care and results to diagnose infection are returned quickly. This method has the potential of reducing clients' number of potential visits and links them to care and treatment. Decentralization refers to expanding testing and treatment services to other facilities, while integration refers to incorporating testing and treatment into other care services such as primary care and community harm reduction and HIV programs. Task sharing refers to other health care professionals providing care and treatment (e.g. non-specialist doctors and nurses).[11,12]

At the individual level, direct antiviral treatments are recommended to treat chronic hepatitis C infection (ages 3+).[7,11,12] Telemedicine is equally effective as face-to-face interactions for hepatitis C care[10] and interventions that decrease barriers and increase engagement in care for people who inject drugs include integrated care and case management (linkage to care and treatment initiation),[5,11,13] peer involvement and support,[5] opioid substitution therapy[8] and routinized and streamlined testing.[14] Integrated care and case management refers to individuals, such as people who inject drugs, receiving hepatitis C care and coordination of services from the same location as they receive other services.[5,11,13] Peer involvement and support refers to individuals who are currently or formerly being treated for HIV or hepatitis C who act as peer mentors to those at-risk for hepatitis C.[5] Their role is to facilitate or deliver point-of-care hepatitis C testing, outreach, education and/or mentorship. Opioid substitution therapy is a therapy that uses less harmful prescription opioids in place of more harmful opioids,[8] while routinized and streamlined testing refers to offering all needle exchange clients testing, providing them details about the test, and then allowing them the option to decline.[14]

Decision

We explored the following interventions in the next phase: universal screening for adults aged 18-79, universal screening for pregnant adults and simplified hepatitis C service delivery (i.e. decentralization of services, integrated service delivery and task sharing). In our region, many of the other interventions – such as point-of-care testing, contingency management, telemedicine and peer involvement and support – would likely work best within a simplified hepatitis C delivery model whereby care and treatment is more accessible and provided by other health professionals. Therefore, we will not move forward with these specific interventions into the next phase because it would be too premature to implement with any degree of success without an already established simplified hepatitis C service delivery model in our community. If a simplified delivery model were to exist, we will look at these interventions and identify the feasibility of implementing them within this model. EMR alerts work best within a universal screening model, so we will not address this either.

Phase 4: Choosing Interventions

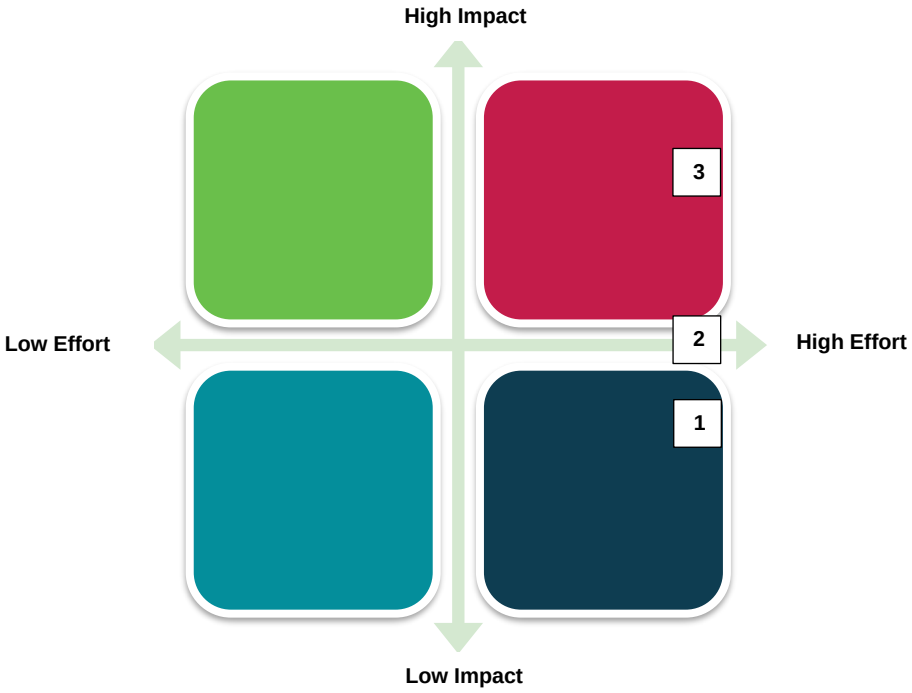
Using the Impact/Effort Grid, list the best practices from above in descending order (i.e. highest score to lowest score) and provide a brief rationale for each score.

Though guidance from the U.S. Preventive Services Task Force recommends universal screening for all adults, additional guidance and evidence from a Canadian context suggests otherwise. The Canadian Task Force on Preventative Health Care does not recommend hepatitis C screening for adults who are not at elevated risk.[15] Further, a Canadian study in an investigating opt-out HCV and HIV screening in an emergency department showed that even though nearly two thirds of patients were tested for HCV (62%), less than two percent of new cases were detected.[16] Additional evidence is required to assess the cost benefit of instituting this practice. In our impact/effort grid (Figure 2), we scored universal screening (#1) as low impact and high effort. We scored it this way because of the mixed guidance and evidence reporting the effectiveness of this intervention and because changing new guidance would require significant advocacy work.

Pregnant women are at an elevated risk for hepatitis C; however, current guidance in Ontario only suggests risk-based screening (vs. universal screening) for hepatitis C. We scored universal screening for all pregnant adults during each pregnancy (#2) as medium impact and high effort because treatment in postpartum may reduce the risk of transmission in subsequent pregnancies and because changing new guidance would require significant advocacy work.

Simplified hepatitis C service delivery (#3) reduces barriers for vulnerable populations, such as people who inject drugs, allowing them easier access to testing and treatment in primary or community care settings. We scored this as high impact because people who inject drugs make up a significant proportion of new hepatitis C cases and a simplified model of service delivery expands opportunities for this hard-to-reach population to access services from familiar, trusted providers. We scored this as a high effort initiative because changing new guidance would require significant advocacy work.

Figure 2. Impact/Effort Grid



Legend

Intervention #	Level of Influence	Protective Factors	Risk Factors	Evidence-based Interventions via Literature Search
1	Public Policy	Universal screening for adults aged 18-79 years	N/A	Universal screening for adults aged 18-79 years
2	Public Policy	Universal screening for all pregnant adults during each pregnancy	N/A	Universal screening for all pregnant adults during each pregnancy
3	Community	Point-of-care hepatitis C RNA nucleic acid testing at treatment sites	N/A	Simplified hepatitis C service delivery (i.e. decentralization of services, integrated services delivery, task sharing)

Phase 5: Planning Interventions

Based on your rankings and descriptions above, suggest how to move forward with our programming. Consider some or all of the following options: starting a new intervention, stopping current activities and/or changing aspects of current programming to better align with the best practices.

We will explore how we can simplify hepatitis C service delivery in our region. We understand this will require significant advocacy and work that likely coincides with other health equity initiatives. Prior to the pandemic, a similar initiative started by our previous Medical Officer of Health engaged stakeholders in our region to help vulnerable individuals access hepatitis C services. We will use the results of this situational assessment to reignite conversations with our stakeholders about providing simplified hepatitis C services to clients in our region.

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