The McMaster Health Forum
The McMaster Health Forum’s goal is to generate action on the pressing health-system issues of our time, based on the best available research evidence and systematically elicited citizen values and stakeholder insights. We aim to strengthen health systems – locally, nationally, and internationally – and get the right programs, services and drugs to the people who need them.

About citizen panels
A citizen panel is an innovative way to seek public input on high-priority issues. Each panel brings together 14-16 citizens from all walks of life. Panel members share their ideas and experiences on an issue and learn from research evidence and from the view of others. A citizen panel can be used to elicit the values that citizens feel should inform future decisions about an issue, as well as to reveal new understandings about an issue and spark insights about how it should be addressed.

About this brief
This brief was produced by the McMaster Health Forum to serve as the basis for discussions by the citizen panel on how to prevent and manage infectious diseases among people who inject drugs in Ontario.
This brief includes information on this topic, including what is known about:
• the underlying problem;
• three possible elements of an approach to addressing the problem; and
• potential barriers and facilitators to implement these elements.

This brief does not contain recommendations, which would have required the authors to make judgments based on their personal values and preferences.
Table of Contents

Key Messages .......................................................................................................................... 3

Questions for the citizen panel .............................................................................................. 4

The context: Why is preventing infectious diseases among people who inject drugs important? ................................................................................................................................. 7

The problem: Why is preventing, treating and managing infectious diseases among people who inject drugs so challenging? ................................................................................................................................. 11

Injection drug use is associated with increased risk of infectious diseases ....................... 12

Stigma and discrimination experienced by people who inject drugs may reduce access to care 13

Limited education/training and lack of clear guidelines for health professionals makes delivering appropriate care challenging ........................................................................................................ 14

Limited coordination for health and social supports makes person-centred care hard to provide ........................................................................................................................................ 15

Elements of an approach to address the problem ................................................................. 16

Element 1 – Strengthen efforts to prevent infectious diseases among those who inject drugs . 19

Element 2 – Enhance the infection-management capacity of community points of contact for people who inject drugs ........................................................................................................ 21

Element 3 – Strengthen patient-centred care in specialty/acute-care settings .................. 24

Implementation considerations ................................................................................................. 27

Acknowledgments .................................................................................................................. 29

References ................................................................................................................................ 30
Key Messages

What’s the problem?
Preventing and managing infectious diseases among people who inject drugs in Ontario is challenging because:

- injection drug use is associated with increased risk of infectious diseases;
- stigma and discrimination experienced by people who inject drugs may reduce access to care;
- limited education/training and unclear guidelines for health professionals makes delivering care challenging; and
- limited coordination for health and social supports makes person-centred care hard to provide.

What do we know about elements of a potentially comprehensive approach for addressing the problem?

- Element 1: Strengthen efforts to prevent infectious diseases among those who inject drugs
  - This could include: 1) enhancing efforts that prevent or reduce drug use or the risk of infectious diseases among people who inject drugs; and 2) investing in education efforts among people who inject drugs.

- Element 2: Enhance the infection-management capacity of community points of contacts for people who inject drugs
  - This could include: 1) increasing the availability and accessibility of medical services for infectious diseases at community points of contact for people who inject drugs; 2) training staff in community points of contact to recognize, manage and treat infectious diseases among people who inject drugs; and 3) enhancing coordination of care and links to additional treatment through ‘hubs’ located in common community contact points for people who inject drugs.

- Element 3: Strengthen patient-centred care in specialty/acute-care settings
  - This could include: 1) developing and supporting the implementation of clinical practice guidelines; 2) providing comprehensive treatment for infectious diseases, substance use and mental health problems; 3) developing and implementing new approaches to coordinate follow-up care in the community; and 4) providing health professionals and staff at hospitals with training in how to best provide care to a highly marginalized and stigmatized group.

What implementation considerations need to be kept in mind?

- Barriers to implementing these elements might include: 1) coordinating many different groups and resources that need to be involved to provide needed care; 2) overcoming the stigma and discrimination related to people who inject drugs; and 3) addressing the many structural factors that contribute to injection drug use such as trauma, poverty and lack of stable housing.

- A potential window of opportunity for implementing many components of the elements is the province’s recent announcement that the overdose prevention and supervised consumption sites will be kept, but with a focus on treatment. This could support a focus on preventing and managing infectious diseases both at these sites and with other parts of the system.
Questions for the citizen panel

>> We want to hear your views about a problem, three elements of a potentially comprehensive approach to addressing it, and how to address barriers to moving forward.

Box 1: Questions for citizens

Questions related to the problem
• What do you think are the biggest challenges in preventing and managing infectious diseases?
  o In accessing care?
  o In receiving information or education about the ongoing management of infectious diseases?
  o In coordinating care between different types of providers or groups?
  o In receiving follow-up care?
• Do you think stigma and discrimination related to drug use affects access to or quality of care?

Questions related to the elements of a potentially comprehensive approach to address the problem
• What’s needed to prevent or reduce infectious diseases among people who inject drugs?
• What’s needed to improve the treatment and management of infectious diseases in the community?
• What’s needed to improve the treatment and management of infectious diseases in hospitals

Question related to implementation considerations
• What are the biggest barriers to pursuing these elements?
• What are the biggest opportunities that could help to implement these elements?
Box 2: Glossary

People who inject drugs: Refers to when someone injects drugs subcutaneously, intramuscularly, or intravenously, whereas people who use drugs includes this and other means for using drugs, such as smoking or ingestion.

Infectious diseases: Conditions caused by pathogenic microorganisms, such as bacteria, viruses, parasites, or fungi that can be spread, directly or indirectly, from one person to another. (1)

Social determinants of health: Refer to a specific group of social and economic factors within the broader determinants of health. These relate to an individual’s place in society, such as income, education or employment. Experiences of discrimination or historical trauma are also important social determinants of health for certain groups such as Indigenous Peoples. (3)

Peripherally inserted central catheter (PICC): A central catheter placed in the arm to provide direct administration of antibiotics and other medications. PICC lines may be used to avoid having to put a new IV in every few days. Individuals may be discharged from hospital with PICC lines and followed up with in the community by health professionals to provide ongoing IV medications. (5)

Harm reduction: Policies, programs and practices that aim to reduce the harms associated with addiction and substance use, without necessarily requiring people who use substances to abstain or stop. Central to this approach is to provide people who use substances a choice of how to minimize harms through non-judgmental and non-coercive strategies. (7)

Primary care: Level of a health-service system that provides entry into the system for all new needs and problems, provides person-focused (not disease-oriented) care over time, provides care for all but very uncommon or unusual conditions, and co-ordinates or integrates care provided elsewhere by others. (9)
Box 2: Glossary (cont.)

Community Health Centres: Non-profit organizations that provide primary-health and health-promotion programs for individuals, families and communities. They provide education and advice on helping families access the resources they need from other community agencies. They link individuals with support and self-help groups that offer peer education, support in coping, or are working to address the wide range of conditions that affect health.(2)

Specialty care: Medical services provided in hospitals, using emergency-service infrastructure or condition-specific facilities (such as for mental health and addictions).

Coordinated care (coordinated services): The deliberate organization of patient care between two or more providers (health or social) to facilitate the seamless delivery of services. Coordinated care is often managed through information exchange between professionals responsible for different aspects of care, for example from hospital to a community-health provider.(4)

People (and family) centred care: An approach to planning, delivering and evaluating health services that is grounded in a partnership among health professionals, individuals being cared for and their families.(6)

Trauma-informed care: Refers to therapeutic approaches that validate and are tailored to the unique experience of a person coping with post-traumatic stress disorder. It understands the symptoms of trauma to be coping strategies that have developed in reaction to a traumatic experience and recognizes that a person may have behavioural, emotional or physical adaptations that have developed in specific response to overwhelming stressors.(8)
The context: Why is preventing infectious diseases among people who inject drugs important?

The recent rise in overdoses has brought attention to injection drug use and its complications, one of which is the significant risk of infectious diseases. These diseases range from being:

- not immediately life-threatening, such as skin and soft tissue infections, but which may lead to more serious infectious diseases if not treated;
- curable but long-term and hard-to-diagnose infectious diseases, such as hepatitis C;
- chronic and incurable infectious diseases such as HIV; to
- potentially life-threatening conditions such as:
  - endocarditis (infection of the inner lining of heart chambers and valves),
  - osteomyelitis (infection of the bone), and
  - invasive group A streptococcus (a bacterial infection that can invade the lungs or blood, or spread along tissue that surround muscle).
For the most part, when the right supports are in place these infectious diseases can be prevented, treated or managed. However, more needs to be done to provide a person-centred approach. This will need to include:

• efforts to address both health and social challenges (for example, housing, employment, transportation); and

• coordinated efforts by those working in the health system (such as those working in harm-reduction programs, community health centres and specialist medical professionals), and in social systems.

The time seems right for action now given the attention on the issue and the recent announcement from the Ontario government that funding for drug consumption and treatment services will continue.
Preventing and Managing Infectious Diseases Among People Who Inject Drugs in Ontario

Box 3: The health system in Ontario

Key features of the health system

- Medical care provided in hospitals and by physicians is fully paid for as part of Ontario’s publicly-funded health system.
- Care and support provided by other healthcare providers such as nurses, physiotherapists, occupational therapists and dietitians are typically not paid for by the health system, unless provided in a hospital or long-term care setting, or in the community through Family Health Teams, Community Health Centres and community and other designated clinics.
- Other healthcare and community services such as prescription drug coverage, community support services and long-term care homes may be partly paid for by the health system, but any remaining costs need to be paid by patients or their private insurance plans.
- Fourteen geographically defined Local Health Integration Networks (LHINs) have responsibility for the planning and funding of healthcare in their regions, and for ensuring that the different parts of the health system in their regions work together.

Features most relevant to the prevention, treatment and management of infectious diseases

- The key players for infectious diseases in Ontario are the 36 local public health agencies (and 105 satellite offices) which provide a range of health-promotion and disease-prevention services. This includes providing communicable disease control (such as through education and select screening services) and collecting local data about infectious diseases in the province.
- These agencies are supported by 11 public health laboratories which provide clinical testing, such as HIV testing, related to public health services provided by the province.
- A wide range of health providers are responsible for delivering treatment and management services for infectious diseases.
- The location and health provider involved in delivering this care may differ based on the infection and its severity.
Box 3: The health system in Ontario (cont.)

Features most relevant to those who inject drugs

- Consumption and treatment services is a new program that will provide integrated, wrap-around services to connect those who use drugs to needed primary care, treatment, and health and social services.

- Consumption and treatment services will be established in existing Community Health Centres, Aboriginal Health Access Centres or similar health care or community-based organizations. They may provide a combination of the following services:
  - supervised consumption;
  - addictions treatment (or referrals to treatment);
  - wrap-around services for primary care, mental health, housing and other supports; and
  - harm reduction services.

- Other harm reduction services are provided by the federal, provincial and municipal governments, as well as by charitable or faith-based organizations including: needle and syringe programs (which distribute clean injection products); opiate substitution therapy; Naloxone distribution and overdose response training; and mobile and street outreach, among others.

- Other mental health and addictions services may or may not be covered under the public insurance plan, and can be provided in a person’s home, community mental health and addictions agencies, primary-care offices and specialist’s offices. They are also provided in a variety of other settings outside of the health system, such as schools, prisons and homeless shelters.

- Ontario has 105 Community Health Centres designed to deliver primary-care services in combination with health promotion and disease prevention for people:
  - without a health care provider;
  - who are newcomers to Canada;
  - with mental health and addiction issues; and/or
  - facing barriers such as language, culture, physical disability, homelessness and poverty, among others.
The problem: Why is preventing, treating and managing infectious diseases among people who inject drugs so challenging?

We have identified four factors that contribute to the challenge of treating and managing infectious diseases among people who inject drugs, which include that:

• injection drug use is associated with increased risk of infectious diseases;
• stigma and discrimination experienced by people who inject drugs may reduce access to care;
• limited education/training and unclear guidelines for health professionals makes delivering care challenging; and
• limited coordination for health and social supports makes person-centred care hard to provide.

We describe each of the challenges below.
Inject drug use is associated with increased risk of infectious diseases

People who inject drugs are at much higher risk of infectious diseases than those who do not inject drugs. These infectious diseases can range from those that are:

- non-life-threatening (for example, skin and soft tissue infections) that can potentially lead to more serious infectious diseases if not addressed;
- curable but long-term or hard-to-diagnose infectious diseases such as hepatitis C;
- chronic and incurable infectious diseases such as HIV; to
- life-threatening infectious diseases that require quick access to antibiotics or surgery such as:
  - endocarditis (infection of the inner lining of heart chambers and valves),
  - osteomyelitis (infection of the bone), and
  - invasive group A streptococcus (a bacterial infection that can invade the lungs or blood, or spread along tissue that surround muscle).

People who inject drugs are also at risk of having multiple infectious diseases at once. The combination of HIV and hepatitis C is particularly common. For example, up to 10% of people who inject drugs may be co-infected with HIV and hepatitis C.(10) Such co-infection is a concern because it increases the risk of death. It also makes treatment for each infection harder since medications do not always work well together or can cause harm.(11)

Infectious diseases may be passed to others from sharing injecting equipment such as needles, syringes, water, cookers or acidifiers. Data from 2012 show that approximately one in three people who inject drugs shared injecting equipment in the past six months.

Some factors have been shown to increase rates of needle sharing such as the choice of drug to inject, and co-occurring mental health problems such as psychological distress and depression.(12-17)
Stigma and discrimination experienced by people who inject drugs may reduce access to care

People who inject drugs face stigma and discrimination from a number of different sources. This stigma may be internalized and come from the individual themselves, may come from health professionals, or from society more generally.

Internalized stigma can lead people to try to hide their drug use from family and friends. This can then lead to risky injection behaviours. They may also be less likely to seek care or make use of community supports such as needle-exchange services.

Negative attitudes from health professionals towards people who inject drugs also create stigma. This may lead to negative relationships and the dismissal of genuine health concerns. As a result, people who inject drugs may not seek medical care when they need it.

A lot of stigma also comes from the general public. For example, the criminalization of drug use and possession in Canada makes it hard for people to talk about:

- their substance use;
- injection practices; and
- health and social supports they may need.

These concerns are even more important for people living in rural or remote communities, where people who inject drugs may be more easily recognized.

Public opinion about drug use is also important as it can determine what, if any, services are made available in the community. For example, it is often hard to provide needed supports and services in communities that hold negative views about injection drug use.
Limited education/training and lack of clear guidelines for health professionals makes delivering appropriate care challenging

Some health professionals are provided with training in how to care for those who inject drugs or are trained as specialists in a related area (e.g., infectious-disease specialists). However, most are not given the education or training needed in how to prevent, treat or provide ongoing management for infectious diseases for people who inject drugs. Without this knowledge, health professionals may not be familiar with how to provide the complex care often needed for this population. For example, health professionals may not all have experience in:

- recognizing early signs of infectious diseases;
- providing individuals with advice on self-management;
- recognizing signs of withdrawal among people admitted to hospital;
- caring for co-occurring conditions; or
- providing care that is respectful of individual circumstances.

Without this training, individuals may not be receiving care that is tailored to their needs. This can result in them not adhering to medical advice.

There are also conflicting guidelines about how to treat serious bacterial infections for people who inject drugs. For example, there is debate about if and when patients who inject drugs should be given a peripherally inserted central catheter (PICC) line (an intravenous line that facilitates the long-term administration of antibiotics and other drugs). Some professionals argue that PICC lines enable the best care for infections while others express concern about the potential for PICC lines to be used improperly and/or to inject drugs.
Limited coordination for health and social supports makes person-centred care hard to provide

Care and support for people who inject drugs is typically not well coordinated between:
• services in community and those provided in hospitals; or
• professionals working in health and social services (such as in housing or employment).

Efforts have been made in some communities to better connect harm-reduction services with primary care, but this is not the case everywhere in the province. Also, staff working at harm-reduction services are not always trained to provide care for infectious diseases or to counsel those injecting drugs on how to address infections.

Gaps also exist in how these services are funded. Funding is spread across many players such as local public-health agencies, Local Health Integration Networks, community agencies, primary care, emergency departments and select social-service agencies. Each are funded to deliver a specific program or set of services. The lack of coordinated and shared funding makes for a patchwork of initiatives. Financial resources are also not evenly spread across the province. For example, some rural and northern communities report not having enough resources to provide the services available in other parts of the province.

Lastly, making decisions about the policies and programs to implement to help people who inject drugs is complex because all three levels of government often need to be involved. For example:
• the municipal and provincial government share responsibility for public health;
• the provincial government is responsible for the delivery of health and social supports; and
• the federal government retains control over:
  ○ exemptions to the Controlled Drugs and Substances Act (which is needed for safe injection - or consumption - sites), and
  ○ services for on-reserve Indigenous peoples and other specific populations.

Even without considering all of the different organizations that work within each of these levels of government, reaching an agreement about how to approach this issue is difficult.
Elements of an approach to address the problem

To promote discussion about the pros and cons of potential solutions, we have selected three elements of an approach to preventing and managing infectious diseases among injection drug users.

Many approaches could be selected as a starting point for discussion. We selected the following three elements of an approach for which we are seeking public input (Figure 1):

1. strengthen efforts to prevent infectious diseases among those who inject drugs;
2. enhance the infection-management capacity of community points of contact for people who inject drugs; and

These elements should not be considered separately. Instead, each should be considered as contributing to a potentially comprehensive approach to addressing the problem. New elements could also emerge during the discussions on the day of the citizen panel. Box 4 below summarizes how research evidence has been identified, selected and summarized for each element.
Figure 1: Elements of an approach for preventing and managing infectious diseases among people who inject drugs in Ontario

- Strengthen efforts to prevent infectious diseases among those who inject drugs
  - Enhancing efforts that prevent or reduce drug use or the risk of infection among people who inject drugs
  - Investing in education efforts among people who inject drugs
- Enhance the capacity of community points of contact to manage infectious diseases
  - Increasing the availability and accessibility of medical services for infectious diseases at community points of contact for people who inject drugs
  - Training staff in community points of contact to recognize, manage and treat infectious diseases among people who inject drugs
  - Enhancing coordination of care and links to additional treatment through "hubs" located in common community contact points for people who inject drugs
- Strenthen patient-centred care in specialty/acute-care settings
  - Developing and supporting the implementation of clinical practice guidelines
  - Providing comprehensive treatment for infectious disease, addiction, and concurrent mental health problems
  - Developing and implementing new approaches to coordinate follow-up care in the community
  - Providing health professionals and staff at hospital with training in how to best provide care to a highly marginalized and stigmatized group
Box 4: Identification, selection and synthesis of research evidence presented in this brief

- Whenever possible, we describe what is known about each element based on systematic reviews.
- A systematic review is a summary of all the studies looking at a specific topic.
- A systematic review uses very rigorous methods to identify, select and appraise the quality of all the studies, and to summarize the key findings from these studies.
- A systematic review gives a much more complete and reliable picture of the key research findings, as opposed to looking at just a few individual studies.
- We identified systematic reviews in Health Systems Evidence (www.healthsystemsevidence.org). Health Systems Evidence is the world’s most comprehensive database of research evidence on health systems.
- A systematic review was included if it was relevant to one of the elements covered in the brief.
- We then summarized the key findings from all the relevant systematic reviews.
Element 1 – Strengthen efforts to prevent infectious diseases among those who inject drugs

Overview
People who inject drugs often have difficulty accessing the types of services and supports that can help to prevent infectious diseases. This element focuses on the types of supports and services that could help to prevent infectious diseases and may include:

- enhancing efforts that:
  - prevent or reduce injection drug use (for example, efforts to better connect people to social supports such as housing that are important to address underlying drivers of substance use), and
  - reduce the risk of infectious diseases among people who inject drugs (for example, using harm-reduction initiatives such as needle-exchange programs, supervised consumption/injection sites, opioid substitution; and

- investing in education efforts among people who inject drugs to focus on:
  - understanding their risk for infectious diseases,
  - how to minimize the risk for infectious diseases and any resources that may be available to support risk reduction,
  - what early symptoms of infectious diseases to look for and the consequences of delayed treatment, and
  - what services for reducing risk and treatment are available and where they can be accessed.

Evidence to consider
We found several systematic reviews (i.e., a synthesis of results from all the studies addressing a specific topic) that provide evidence about these sub-elements, with most of the included literature relating to how to reduce the risk of infectious diseases among people who inject drugs. We summarize these findings in Table 1.
Questions to consider

Overarching questions to consider
• What’s needed to prevent or reduce infectious diseases among people who inject drugs?

Additional questions to consider
• What’s needed to prevent or reduce injection drug use?
• What would make it easier to test for and get a diagnosis for infectious diseases?
• What information or education do you think people who inject drugs need to prevent or manage infectious diseases?

Table 1: Summary of evidence about element 1

<table>
<thead>
<tr>
<th>Sub-element</th>
<th>Key findings</th>
</tr>
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</table>
| **Enhancing efforts that prevent or reduce drug use or the risk of infectious diseases among people who inject drugs** | • Providing peer-based behaviour modification that includes elements such as skill building for avoiding injecting drugs, education and access to addictions support may help reduce injection drug use, as well as people starting to inject drugs. (19)  
• Needle and syringe exchanges are associated with reduced needle sharing and reduced transmission of HIV, but were found to have little effect on the transmission of hepatitis C. (20-24)  
• The combination of needle and syringe exchanges with other approaches, such as opiate-substitution therapy, appears to be effective in reducing hepatitis C. (25; 26)  
• Similarly, providing needle and syringe exchanges alongside health services improved the use of health services by people who inject drugs, reduced their use of emergency departments and may be associated with reduced rates of injection drug use. (26)  
• Opiate substitution therapy was found to reduce HIV transmission, needle and equipment sharing, and may be associated with a decrease in injection drug use. (25; 27-30)  
• Finally, safe injection (consumption) sites were generally found to be effective at promoting safe conditions for injection and are associated with reduced public injection. |
| **Investing in education efforts among people who inject drugs** | • Though there is a wide variety of different education efforts, they were found to generally be effective in reducing one or more of public injection, needle sharing, injection drug use, or deaths from opioid overdose. (31-34) |
Element 2 – Enhance the infection-management capacity of community points of contact for people who inject drugs

Overview
This element focuses on identifying ways to improve the supports and services available in the community to help treat and manage infectious diseases. It also focuses on how to better equip those who work in the community to address the unique needs of people who inject drugs.

This could include:
• increasing access to medical care at common places of contact for people who inject drugs, such as community health centres, primary-care practices, organizations providing harm reduction services, and public-health units;
• training staff in the community to recognize, treat and manage infections among people who inject drugs;
• changing or expanding the roles of certain health professionals; and
• making care more coordinated through ‘hubs’ located in common community contact points, which could include providing:
  o safe care environments after hospital discharge (such as transitional housing or residential care) where treatment for substance use, safe management of infectious diseases and other complications can be provided, and
  o outreach for people who inject drugs who require follow-up after being discharged from hospital.

Evidence to consider
We found several systematic reviews that provide evidence about these sub-elements. Most examined ways to reduce barriers to community-based care for people who inject drugs. We were unable to find any systematic reviews about the second bullet above (training staff in the community to recognize, treat and manage infectious diseases among people who inject drugs), but we include findings from related reviews. We summarize these findings in Table 2.
Questions to consider

Overarching question to consider

• What’s needed to improve the treatment and management of infectious diseases in the community?

Additional questions to consider

• What’s needed to create easier access to community-based care?
• What skills or sensitivities do you think community providers need?
• What do you think would make care better coordinated in the community?
Table 2: Summary of evidence about element 2

<table>
<thead>
<tr>
<th>Sub-element</th>
<th>Key findings</th>
</tr>
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</table>
| Increasing the availability and accessibility of medical services for infectious diseases at community points of contact | • Nurses have been found to provide effective ‘low-barrier’ (i.e., easy to access) care for people who inject drugs. Nurses have also been found to act in leadership positions for care teams with many professionals, but these roles have also been found to lead to professional burn-out. (35; 36)  
  • Other suggestions for low-barrier care or for models of care that may improve access to care in the community, include:  
    - mobile screening for infections such as HIV and hepatitis C;  
    - case management;  
    - peer navigation and outreach services; and  
    - including peers as part of the care team. (35; 37)                                                                                       |
| Training staff in community points of contact to recognize, manage and treat infections | • People living with HIV who receive care from providers with experience and expertise in HIV:  
  - had better viral load control;  
  - were more likely to be on antiretroviral therapy;  
  - were less likely to seek care in an emergency room; and  
  - were more likely to be retained in care. (38-40)                                                                                       |
| • Given that many people with HIV report negative interactions with health professionals, one review suggested that providing sensitivity training and education in treating and managing infectious diseases may help to create a trusting and safe environment. (39) |
| Enhancing coordination of care and links to additional treatment through ‘hubs’ located in common community contact points | • Health services that provide both medical and social care improved retention in care, reduced mortality and reduced substance use among those with HIV. (41)  
  • However, implementing programs that can generate these benefits is often difficult as it requires a lot of coordination between those providing health and social services. (42; 43)  
  • Coordination using care management, nurse navigators, active referrals and peer advocates are also effective at improving screening for infectious diseases, adherence to follow-up care and improving physical and mental well-being. (36; 44; 45)  
  • This and other types of coordination can be supported by changing the way services are paid for. This could include dedicated funding for coordinated care initiatives, delegated financing to individual organizations, or joint budgeting between health and social-care organizations. (46) |
Element 3 – Strengthen patient-centred care in specialty/acute-care settings

Overview
This element focuses on improving care in hospitals for people who inject drugs. This includes determining how best to connect them to appropriate follow-up care once they leave hospital. This could include:

- creating and using clinical practice guidelines for:
  - treating infectious diseases among people who inject drugs, and
  - addressing the unique health and social needs that need to be considered to provide the best possible care;
- providing comprehensive care for infectious diseases, substance use and mental health problems by:
  - establishing safe interim discharge environments such as transitional housing,
  - rapid addiction access management clinics, and
  - enhanced community access to methadone and buprenorphine/naloxone;
- using new approaches to retain people who inject drugs in the care they need to treat infectious diseases by, for example:
  - placing trained health professionals such as nurses in community points of contact to provide follow-up care for infectious diseases and to check peripherally inserted central catheter (PICC) lines,
  - involving peers in the delivery and coordination of follow-up care, or
  - providing supervised consumption sites within hospital settings to help keep people in hospital when needed; and
- providing health professionals and staff at hospitals with training in how best to provide care to a highly marginalized and stigmatized group, such as by:
  - using trauma informed approaches to care, and
  - providing anti-oppression training.

Evidence to consider
We found several systematic reviews that provide evidence about these sub-elements. We did not find systematic reviews about the first bullet (creating and using clinical practice guidelines) or the fourth bullet (providing training to staff). However, we include findings from related reviews about these activities. We summarize these findings in Table 3.
Questions to consider

Overarching question to consider
• What’s needed to improve the treatment and management of infectious diseases in hospitals?

Additional questions to consider
• What should be prioritized in guidance for health professionals?
• How could hospitals better support whole-person care?
• What would help keep patients engaged in the care they need?
• What training is needed to ensure health professionals are sensitive to the unique needs of those who inject drugs?

Table 3: Summary of evidence about element 3

<table>
<thead>
<tr>
<th>Sub-element</th>
<th>Key findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developing and supporting implementation of clinical practice guidelines</td>
<td>• Interventions, such as clinical practice guidelines that help to support changes in clinical practice, may be effective when they address underlying challenges, identify barriers to changing professional behaviours, and are implemented in a way that maximizes their impact.(47-49)</td>
</tr>
<tr>
<td>Providing comprehensive treatment for infectious diseases, substance use, and mental health problems</td>
<td>• Providing comprehensive treatment for infectious diseases, substance use, and mental health problems improved depression scores and mental well-being. It also improved treatment completion among some individuals.(34; 50)</td>
</tr>
</tbody>
</table>
| Developing and implementing new approaches to coordinate follow-up care in the community | • Several approaches to effectively coordinate follow-up care in the community were found, and include:  
  o having a peer, friend or family member attend an appointment;  
  o peer outreach;  
  o peer counselling at the point of care;  
  o directly observed treatment for HIV; and |
|
| Providing training to health professionals and staff in how to provide care to people who are marginalized and stigmatized | - People with HIV prefer receiving care from professionals who provide emotional support, empathy, understand the condition, enable patient discussions, and involve patients in their care decisions. (55)  
- These qualities could be used to guide training for health professionals and staff within hospitals to ensure they are equipped to provide care to people who inject drugs and other highly marginalized and stigmatized groups. (55) |
| o case management that includes both health and social care. (37; 51; 52)  
- The following were effective in improving retention in follow-up care:  
  o engagement of individuals in their own care;  
  o services delivered by professionals with a strong understanding of the condition (whether infectious diseases, substance use or mental health);  
  o culturally competent care;  
  o the involvement of peers as advocates and members of the care team;  
  o access to resources beyond healthcare such as job assistance, transportation and shelter. (51; 53; 54)  
- Health professionals and health workers providing follow-up care is critical to understand the population and many of the unique challenges they may be experiencing. (51; 53; 54) |
Implementation considerations

It is important to consider possible barriers to implementing the proposed elements. These barriers may affect different groups (for example, patients, citizens, healthcare providers), different organizations or the health system. While some barriers could be overcome, others could be so substantial that they force a re-evaluation of whether an element should be pursued or not. Some potential barriers to implementing the elements could include:

• coordinating the many different groups and resources that need to be involved to provide comprehensive person-centred care;
• overcoming the stigma and discrimination related to people who inject drugs; and
• addressing the many structural factors that contribute to injection drug use such as poverty, trauma, and lack of stable housing.
The implementation of each of the three elements could also be influenced by the ability to take advantage of potential windows of opportunity. A window of opportunity could be a recent event that was highly publicized in the media, a crisis, a change in public opinion, or an upcoming election. A window of opportunity can facilitate the implementation of an element.

Examples of potential windows of opportunity

- **Consumption and treatment services:** The province’s recent announcement that the overdose prevention and supervised consumption sites will be retained, but with a focus on treatment, could support a greater awareness about preventing and managing infectious diseases both in these sites and in collaboration with other points of contact in the system.

- **Opioid crisis:** The ongoing focus on the opioid crisis at all levels of government could lend itself to considering how to better care for people who inject drugs at all levels of health and social systems, including in the prevention of injection drug use.
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Conflict of interest
Michael Wilson is a member of the Board of Directors for South Riverdale Community Health Centre (SRCHC) which offers many of the types of services discussed in this brief. No clients or employees of SRCHC were directly recruited to participate in the citizen panel that this brief was designed to inform. The other authors declare that they have no professional or commercial interests relevant to the citizen brief, however, the work of their organization is sometimes cited. The funder played no role in the identification, selection, assessment, synthesis, or presentation of the research evidence profiled in the citizen brief. Staff of these organizations provided feedback on our approach and on draft materials, however, the authors could act on their input at their sole discretion.

Merit review
The citizen brief was reviewed by a small number of citizens, other stakeholders, policymakers and researchers in order to ensure its relevance and rigour.

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