Hepatitis C virus (HCV) is a major health problem both in the U.S., Europe, Canada, Australia, Europe, and Australia. The most highly rated barriers at the clinic level were: lack of case managers or link-to-care coordinators. The most highly rated barriers at the patient level were: not attending referral appointments for HCV testing, evaluation, and treatment. The most highly rated barriers at the health system level were: lack of funding for non-invasive liver disease testing. Among 203 physicians, 40% were from the U.S. (n=82), 45% were from Europe (n=92), and 58% were from Australia (n=13). This study highlights some of the major barriers as potentially modifiable targets for future research. Further research is needed to better understand physician-perceived barriers to enhance HCV testing, evaluation, and treatment for HCV infection among PWID attending OAT clinics.

**Abstract**

Background: The high prevalence and burden of HCV infection among people who inject drugs (PWID) highlights the need for skilled health care providers (HCPs) interested in optimizing strategies to enhance HCV testing, linkage to care, and treatment. This study evaluated perceived barriers to HCV care among physicians practicing in clinics offering OAT.

Methods: In 2017, 203 physicians (28% practiced in a substance use center, 26% in a methadone clinic, 40% in a hospital-based clinic) were asked to complete an online survey regarding their knowledge, attitudes, and practice patterns toward HCV screening, diagnosis, or treatment.

Sample: Among the 203 physicians, 28% practiced in a substance use center, 26% in a methadone clinic, and 40% in a hospital-based clinic. Many physicians perceived that patients should be asked to wait (36%), and with regard to alcohol use (26%) in order to receive HCV treatment. Major perceived barriers to HCV testing, evaluation, and treatment included lack of funding for non-invasive liver disease testing (mean 2.74), long wait times for patients to see an HCV specialist (mean 2.85), lack of testing for new DAAs (mean 2.70), and reimbursement restrictions based on drug and/or alcohol use (mean 2.74). Many perceived barriers related to patients, including difficulty navigating the health system (mean 3.01), non-attendance for follow-up appointments (mean 3.11), patients fear of side effects (mean 3.09), and lack of motivation to receive treatment (mean 2.56).

Conclusion: Physicians practicing HCV infection among PWID attending opioid agonist therapy (OAT) clinics recognized the importance of HCV testing and treatment for this population. This study highlights several important, potentially modifiable barriers to enhance HCV testing, evaluation, and treatment for HCV infection among PWID attending OAT clinics. Further research is needed to better understand physician-perceived barriers to patient treatment readiness.

**Background**

- Hepatitis C virus (HCV) is a major health problem both in the U.S., affecting 2.7 to 3.9 million people, and globally, affecting 71.1 million people.
- The prevalence of HCV is high among people who inject drugs (PWID).
- There are barriers to HCV care at the level of patient, provider, system, and society.
- In the U.S., little is known about barriers to HCV care for physicians and physician-perceived barriers to test, manage, and treat HCV infections among PWID or those clinics offering opioid agonist therapy (OAT) to treat HCV.

**Objectives**

- To evaluate the perceived barriers to HCV care among physicians practicing in clinics offering opioid agonist therapy to treat HCV.
- To identify the most highly rated barriers to HCV care at the clinic, patient, and health system levels.
- To determine the proportion of respondents who rated each barrier as a barrier to HCV care.

**Design/METHODS**

**Data**
- Data from the 2017 Survey on the Management of HCV in Addiction Clinics Treating Patients on Opioid Agonist Therapy (C-SCOPE) were analyzed.
- C-SCOPE is a self-reported, cross-sectional survey of physicians practicing at clinics providing OAT in the United States (U.S.), Canada, Europe, and Australia.
- Respondent physicians were identified via opt-in online web panels, research databases, and/or certification websites.
- Physicians were asked to respond to a survey regarding their knowledge, attitudes, and practice patterns toward HCV screening, diagnosis, or treatment.

**Sample**
- The present sample included physicians practicing in providing OAT across the U.S. (n=42), Canada (n=16), Europe (n=165), and Australia (n=12). The overall sample size varied between 2017 and May 2017. European countries included Belgium, France, Germany, Italy, Portugal, Netherlands, Spain, Sweden, and the United Kingdom (U.K.).
- Up to 2 physicians per clinic were allowed to participate to ensure a representative sample of physicians within the clinic.

**Inclusion criteria**
- Had to specialize in addiction medicine/psychiatry or have received training or certification in addiction medicine.
- Certified to prescribe OAT.
- At least 50% of time spent in clinics providing OAT, treating patients or in management responsibilities.
- Minimum of 2 years treating patients in providing OAT.
- Currently treating patients who inject drugs with OAT.
- Working at a clinic, center, department, or institution providing OAT.

**Exclusion criteria**
- Working at non-clinical sites, such as institutions or institutions as 2 preciously qualified respondents.
- Unwillingness to comply with study protocol.

**Results**

**Physician and institution characteristics**
- Physicians' specialty of medicine was assessed and included the following categories: addiction psychiatry, psychiatry, primary care provider (PCP)/internal medicine (IM), and others.
- Self-reported importance of HCV testing and treatment.
- Two items used a 5-point scale to measure the level of importance of HCV testing and treatment.
- Response options included: 1=Not at all important, 2=Not very important, 3=Moderately important, 4=Important, 5=Extremely important.
- Scores were grouped into the following categories:
  - Score of 5=Not important
  - Score of 4=Important

**Self-reported perceived barriers for HCV testing, evaluation, and treatment**
- Physicians evaluated 20 potential barriers for OAT patients to enter pathways to HCV care (testing and diagnosis) and 10 potential barriers to continuing pathways to HCV care (treatment), for a total of 64 potential barriers rated on a 5-point Likert scale.
- Items measured the degree to which physicians perceived barriers for HCV testing, evaluation, and treatment.
- Response options included: 1=Not a barrier, 2=Minor barrier, 3=Moderate barrier, 4=Major barrier, 5=Extreme barrier.

**Statistical analysis**
- Descriptive statistics were run and are reported in counts and percentages for categorical variables and means and standard deviations for continuous variables.

**Limitations**

**Conclusions**

- The importance of HCV testing and treatment is recognized by the majority of physicians prescribing OAT.
- Many barriers exist to HCV testing, evaluation, and treatment at the healthcare system, clinic, and patient levels.
- This study highlights some of the major barriers as potentially modifiable for interventions to improve access to testing, evaluation, and treatment for PWID with HCV.
- Future research should develop possible interventions to target and remove these barriers, particularly among PWID attending OAT centers.

**References**


**Figure 4. Patient Barriers to HCV Testing, Evaluation, and Treatment**
- Rating scale on a 5-point Likert scale: 1=Not a barrier, 2=Minor barrier, 3=Moderate barrier, 4=Major barrier, 5=Extreme barrier.
- The most highly rated barriers at the clinic level were: lack of case managers or link-to-care coordinators for HCV testing and treatment, the need for off-site referral for liver disease assessment and treatment, and lack of peer support programs.

**Figure 5. Barriers to HCV Testing and Treatment**
- Rating scale on a 5-point Likert scale: 1=Not a barrier, 2=Minor barrier, 3=Moderate barrier, 4=Major barrier, 5=Extreme barrier.
- The most highly rated barriers at the health system level were: lack of funding for non-invasive liver disease testing, lack of funding for new therapies to treat HCV, required period of abstinence for access to treatment, and long wait times for patients to see an HCV specialist.