

Self-Reported Competency Related to Testing, Management and Treatment of HCV Infection Among Physicians Prescribing Opioid Agonist Therapy: The C-SCOPE Study

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Abstract

Background: This study evaluated competency related to HCV testing, management, and treatment among physicians practicing in clinics offering OAT.

Methods: C-SCOPE is a study consisting of a self-administered survey among physicians practicing at clinics providing OAT in Australia, Canada, Europe, and USA between April and May 2017. A 7-point scale (1=None; 2=Vague knowledge/skills/competence; 3=Slight knowledge/skills/competence; 4=Average; 5=Competent; 6=Very competent; 7=Expert) was used to measure <average competence (score ≤4 of 7) related to HCV testing, management, and treatment.

Results: Among 203 physicians (40% USA, 45% Europe, 14% Australia/Canada), 21% were addiction medicine specialists, 29% were psychiatrists, and 70% were metro/urban [mean PWID managed, 51; years of experience, 11]. The majority perceived HCV testing (82%) and treatment (85%) among PWID as important. The minority reported <average competence with respect to regular screening (12%) and interpretation of HCV test results (14%), while greater proportions reported <average competence in advising patients about new HCV therapies (28%), knowledge of new treatments (37%), and treatment/management of HCV (40%). Adjusting for region, setting, and PWID managed, factors independently associated with <average competence to advise patients about new HCV therapies included being a psychiatrist (vs general practitioner/internist, AOR 4.34; 95% CI 1.55, 12.11) and fewer years of experience (per year, AOR 1.07; 95% CI 1.02, 1.13). Adjusting for region, setting, PWID managed, and experience, the only factor independently associated with <average competence to treat/manage HCV included being a psychiatrist (vs general practitioner/internist, AOR 5.75; 95% CI 2.22, 14.88) and being an addiction medicine physician (vs general practitioner/internist, AOR 2.84; 95% CI 1.18, 6.86).

Conclusion: Physicians treating HCV infection among PWID attending OAT clinics recognized the importance of HCV testing and treatment. However, self-perceived competency related to HCV management and treatment was low, highlighting the importance of improved HCV education and training among physicians practicing in clinics offering OAT.

BACKGROUND

- Hepatitis C virus (HCV) is a major health problem both in the US, affecting 2.7 to 3.9 million people,¹ and globally, affecting 71.1 million people²
- The prevalence of HCV is high among people who inject drugs³
- There are barriers to HCV care at the level of the patient, provider, system, and society⁴
- In the DAA era, little is known about barriers to HCV care for physicians and physicians' perceived competency to test, manage, and treat HCV infections among PWIDs at clinics offering opioid agonist therapy (OAT) to treat HCV

OBJECTIVES

- To evaluate the self-reported competency related to hepatitis C virus (HCV) testing, management, and treatment among physicians practicing in clinics offering OAT

DESIGN/METHODS

Data

- Data from the 2017 *Survey on the Management of HCV in Addiction Clinics Treating Patients on Opiate Agonist Therapies* (C-SCOPE) were analyzed
- C-SCOPE is a self-reported, cross-sectional survey of physicians practicing at clinics providing OAT in the United States (US), Canada, Europe, and Australia
- Respondent physicians were identified via opt-in online web panels, research databases, and/or public and proprietary lists of clinics providing OAT in each country
- Respondent physicians completed an online survey regarding their knowledge, attitudes, and practice patterns toward HCV screening, diagnosis, or treatment

Sample

- The present sample included physicians practicing in clinics providing OAT across the US (n=82), Canada (n=16), Europe (n=92), and Australia (n=13) (Total N=203) collected between April 2017 and May 2017. European countries included Belgium, France, Germany, Italy, Portugal, Netherlands, Spain, Sweden, and the United Kingdom (UK)
- Up to two physicians per clinic were allowed to participate to ensure a representative sample of physicians within clinics
- 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% time spent in clinics providing OAT treating patients or in management responsibilities
 - Minimum of 2 years treating patients in clinic providing OAT
 - Currently treating people who inject drugs (PWID) with OAT
 - Working at a clinic, center, department, or institution providing OAT
- Exclusion criteria:
 - Working at same clinic, center, department, or institution as two previous qualified respondents
 - Unwillingness to comply with study protocol

Measures

Physician and institution characteristics

- Physicians' institutional characteristics assessed include region of institution (US, Canada, Europe, and Australia) and location of institution (metro/urban, suburban/rural)
- The number of patients who were personally managed and actively treated with OAT who have injected drugs in the past month (number of PWID managed) was assessed
- Physicians' specialty of medicine was assessed and included the following categories: addiction medicine, addiction psychiatry, psychiatry, primary care provider (PCP)/internal medicine (IM), and other
- Physicians' years of experience managing patients at an institution providing OAT were assessed

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 among PWID
- Response options included: 1=Not at all important, 2=Not very important, 3=Somewhat important, 4=Very important, 5=Extremely important
- Scores were grouped into the following categories:
 - Score of ≤2=not important
 - Score of ≥3=important

Self-reported competency of HCV testing, management, and treatment

- Seven items used a 7-point scale to measure the level of competency related to HCV testing, management, and treatment
- Response options included: 1=None, 2=Vague knowledge/skills/competence, 3=Slight knowledge/skills/competence, 4=Average, 5=Competent, 6=Very competent, and 7=Expert
- Scores were grouped into the following categories:
 - Score of ≤4=below average (<average)
 - Score of ≥5=above average (>average)

Statistical Analyses

Descriptive statistics

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

Multivariable analyses

- A series of generalized linear models (GLMs) were used to compare self-reported competency levels by physician characteristic groups (eg, specialty, years of experience), adjusting for covariates
- Covariates included region, setting, PWID managed, and years of experience (when not the grouping variable)

*All tests were two sided, with $P < 0.05$ being considered statistically significant.

RESULTS

Sample Characteristics (Table 1)

- Among the 203 physicians, 40% were from the US (n=82), 45% were from Europe (n=92), and 14% were from Australia/Canada (n=29)
- 21% of physicians were addiction medicine specialists, 20% addiction psychiatrists, 29% psychiatrists, 26% PCP/IM, and 4% "other"
- 70% of physicians were at institutions in metro/urban settings and 30% were at institutions in suburban/small city/rural settings
- Physicians managed an average of 51 PWID patients personally and had an average of 11 years of experience

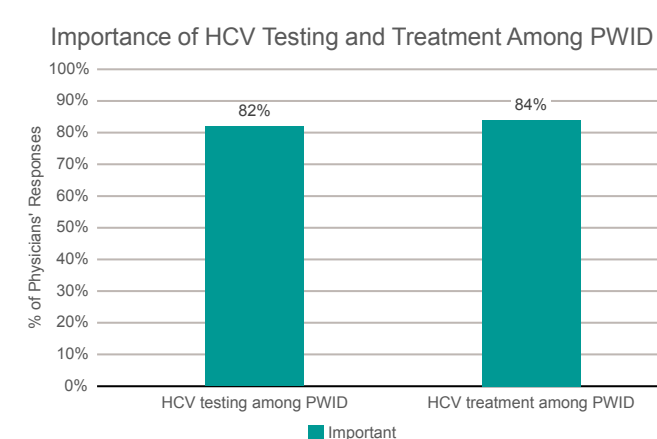
Table 1. Physician and Institution Characteristics (N=203)

		Total N=203
Setting of Institution n (%)	Metro/Urban	141 (70%)
	Suburb/Small City/Rural	62 (31%)
Specialty n (%)	Addiction Medicine	43 (21%)
	Addiction Psychiatry	40 (20%)
	Psychiatry	58 (29%)
	GP/FP/IM	53 (27%)
	Other	9 (4%)
PWID Personally Managed n (%)	0-10 Patients	74 (37%)
	11-40 Patients	63 (31%)
	41+ Patients	66 (33%)
Years of Experience n (%)	2-6 Years	65 (32%)
	3-12 Years	75 (37%)
	13+ Years	63 (31%)
Macro-Region n (%)	USA	82 (40%)
	Total EU	92 (45%)
	Canada/Australia	29 (14%)

Self-Reported Importance and Competency of HCV Testing, Management, and Treatment

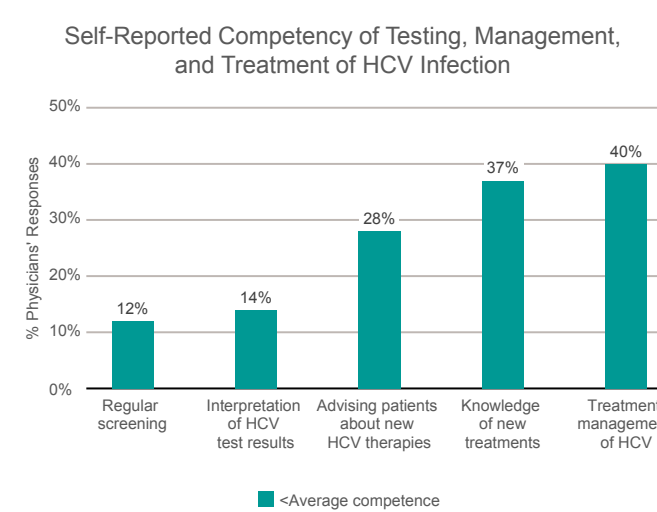
- The majority of physicians saw HCV testing and treatment among PWID as important (Figure 1)
- The minority of physicians reported <average competence with respect to regular screening and interpretation of HCV test results (Figure 2)
- Greater proportions of physicians reported <average competence in advising patients about new HCV therapies, knowledge of new treatments, and treatment/management of HCV (Figure 2)

Figure 1. Percentage of Physicians Rating HCV Testing and Treatment Among PWID as Important



Note: "Important" was categorized as responses of "extremely important," "very important," or "somewhat important."

Figure 2. Physicians' Self-Reported Competence Levels Related to Testing, Management, and Treatment of HCV Infection

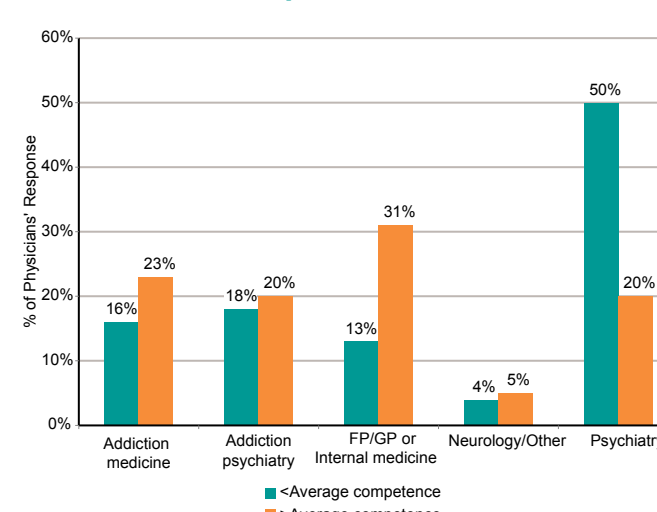


Note: <Average competence was rated as answer choices of ≤4 out of 7 on Likert-point scale (1=None, 2=Vague knowledge/skills, 3=Slight knowledge/skills/competence, 4=Average, 5=Competent, 6=Very competent, and 7=Expert).

Self-Reported Competency by Physician Characteristics

- Being a psychiatrist (vs general practitioner/internist, AOR 4.34; 95% CI 1.55, 12.11) and fewer years of experience (per year, AOR 1.07; 95% CI 1.02, 1.13) were associated with <average competence to advise patients about new HCV therapies, adjusting for covariates (Figures 3 and 4)
- Being a psychiatrist (vs general practitioner/internist, AOR 5.75; 95% CI 2.22, 14.88) and being an addiction medicine physician (vs general practitioner/internist, AOR 2.84; 95% CI 1.18, 6.86) were associated with <average competence to treat/manage HCV, adjusting for covariates (Figure 5)

Figure 3. Physician Specialty Based on Self-Reported Ability to Advise Patients About New Therapies for HCV



Disclosure

This study was sponsored by Merck & Co., Inc., Kenilworth, NJ, USA.

Figure 4. Average Physician Years of Experience Based on Self-Reported Ability to Advise Patients About New Therapies for HCV

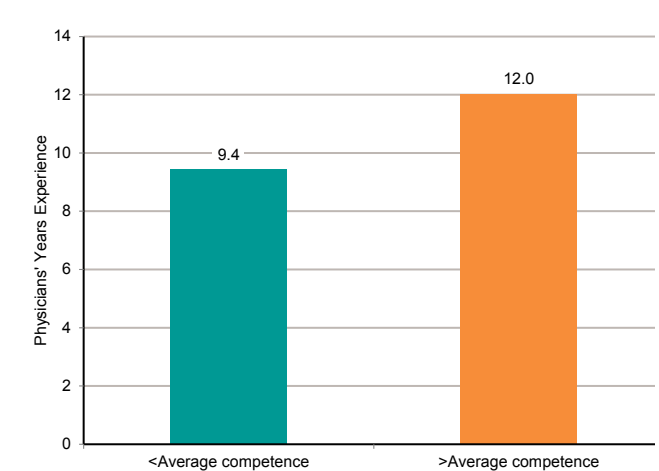
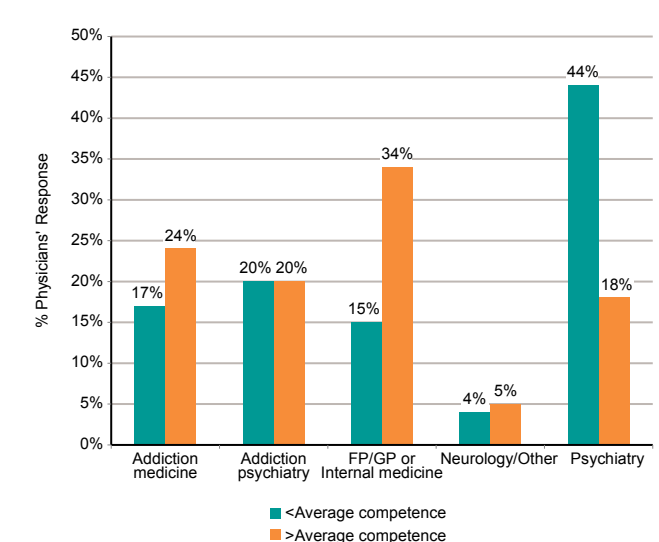


Figure 5. Physician Specialty Based on Self-Reported Ability to Treat/Manage HCV



LIMITATIONS

- All data in this study come from a self-reported physician survey; therefore, the responses are subject to recall bias
- Although the sampling strategy utilized in the C-SCOPE study was designed to increase the odds that it is a representative sample, it can only guarantee representativeness at the regional level but not within other metrics of OAT practices
- Due to the cross-sectional nature of the data, causality cannot be inferred

CONCLUSIONS

- The majority of physicians treating HCV infection among PWID attending OAT clinics view HCV testing and treatment as important
- Despite viewing testing and treatment of HCV as important, a number of physicians self-reported less than average competency related to HCV management and treatment. Self-reported competency for HCV testing was higher
- These low levels of reported competency in HCV management and treatment highlight a critical need for improved HCV education and training for practitioners working in drug and alcohol settings in how to manage and treat HCV among PWID

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