

# Prevalence of hepatitis C screening, testing and care experiences among young adults who use prescription opioid non-medically in Rhode Island, United States.

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## Background

- Rhode Island is one of the six states in the New England region of the United States (US)
- Prescription opioid misuse and opioid injection have contributed to the re-emerging epidemic of incident hepatitis C virus (HCV) infection across the New England region and across the U.S. (Zibbell et al)
- Few studies have evaluated whether HCV-infected young adults who use drugs receive the care they need.

## Objective

- ❖ To examine the prevalence of HCV screening, confirmatory testing, and care experiences among young adult non-medical prescription opioid (NMPO) users in Rhode Island.

## Methods

- Design: Cross-sectional study
- Participants and Recruitment: 200 young adults aged 18-29 years with NMPO use history in the past 30 days were recruited into The Rhode Island Young Adult Prescription Drug Study (RAPiDS).
- Primary outcome of interest: Self-reported history of HCV screening.
- Analysis:
  - Bivariate associations of HCV screening history and covariates were examined with Pearson  $\chi^2$  test
  - Modified Poisson regression models were constructed for multivariable analyses.

## Results

- ❖ Among 196 eligible participants, 154 (78.6%) reported prior screening for HCV (**table 1**), among whom 18 (11.7%) reported positive results.
- ❖ Of these 18 participants, 13 (72.2%) reported receiving a confirmatory HCV test, while 12 (66.7%) were referred for specialty hepatitis care.
- ❖ HCV screening was associated with injection drug use (adjusted prevalence ratio (APR): 1.19; 95% confidence interval (CI): 1.05–1.33) and history of hospitalization for psychiatric illness or depression (APR: 1.23; 95% CI: 1.09–1.39) (**figure 1**).
- ❖ Younger participants (18-23 years) were less likely to have received screening (APR: 0.69; 95% CI: 0.57–0.85).

## Conclusions

- ✓ We found 3 in 4 young adults who use prescription opioids non-medically had been screened for HCV.
- ✓ However, post-screening diagnostic testing, support, and referral to care were inadequate.
- ✓ Younger participants were less likely to have been screened compared to older participants.

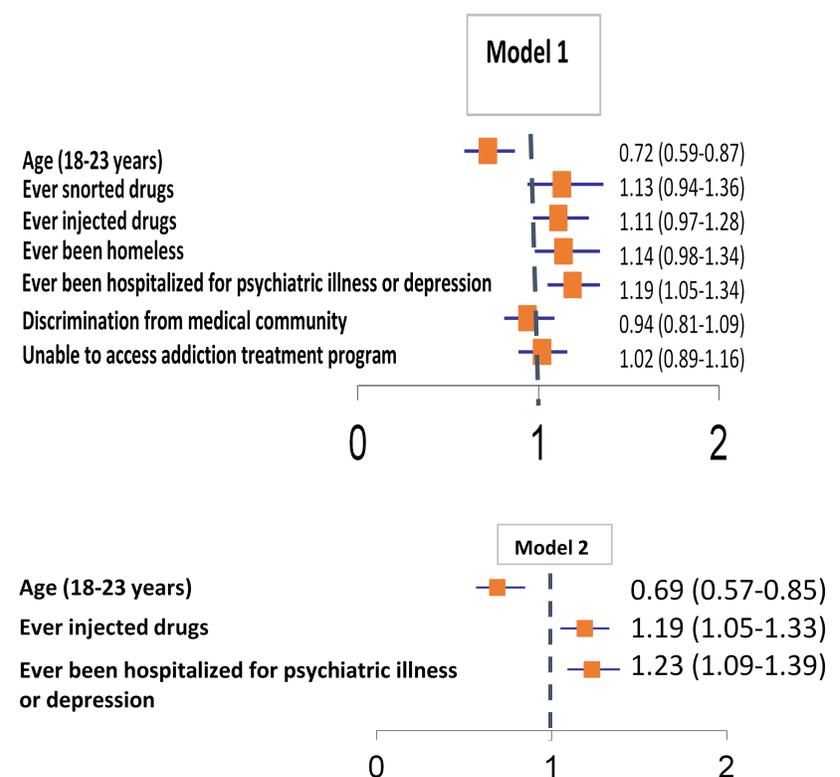
**Recommendation:** Establishing comprehensive integrated care programs which incorporate peer support, counselors, case managers, and educators is recommended to improve follow-up care.

Table 1: Sociodemographic factors, risk behaviors, and barriers to HCV screening among the Rhode Island Young Adult Prescription Drug Study [January 2015-February 2016] stratified by HCV screening history.

Characteristics	Total (%) (N=196)	HCV screening history		p value
		Screened n (%)	Not screened n (%)	
<b>Age (years)</b>				<0.001
18-23	72 (36.7)	43 (59.7)	29 (40.3)	
24-29	124 (63.3)	111 (89.5)	13 (10.5)	
<b>Sex at birth</b>				0.399
Male	130 (67.7)	100 (76.9)	30 (23.1)	
Female	62 (32.3)	51 (82.3)	11 (17.7)	
<b>Ever snorted drugs</b>				<0.001
Yes	116 (59.8)	101 (87.1)	15 (12.9)	
No	78 (40.2)	51 (65.4)	27 (34.6)	
<b>Ever injected drugs</b>				<0.001
Yes	59 (30.3)	56 (94.9)	3 (5.1)	
No	136 (69.7)	97 (71.3)	39 (28.7)	
<b>Ever been homeless</b>				<0.001
Yes	109 (55.6)	96 (88.1)	13 (11.9)	
No	87 (44.4)	58 (66.7)	29 (33.3)	
<b>Ever been hospitalized for psychiatric illness or depression</b>				0.003
Yes	65 (33.2)	59 (90.8)	6 (9.2)	
No	131 (66.8)	95 (72.5)	36 (27.5)	
<b>Health insurance access</b>				0.391
Yes	171 (87.2)	136 (79.5)	35 (20.5)	
No	25 (12.8)	18 (72.0)	7 (28.0)	
<b>Discrimination from medical community</b>				0.078
Yes	59 (30.1)	51 (86.4)	8 (13.6)	
No	137 (69.9)	103 (75.2)	34 (24.8)	
<b>Unable to access addiction treatment program</b>				0.019
Yes	39 (19.9)	36 (92.3)	3 (7.7)	
No	157 (80.1)	118 (75.2)	39 (24.8)	

Due to "don't know / no response", sample size may be less than 196.

Figure 1: adjusted prevalence ratios for Model 1 and Model 2



Model 1: contains variables with  $p \leq 0.20$  from initial bivariable analysis

Model 2: more parsimonious model derived from model 1 using backward selection; all variables have  $p \leq 0.05$

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## Reference

Zibbell JE, Iqbal K, Patel R, et al. Increases in hepatitis C virus infection related to injection drug use among persons aged  $\leq 30$  years-Kentucky, Tennessee, Virginia, and West Virginia, 2006-2012. *MMWR Morbidity and mortality weekly report* 2015;64:453-458.