

Assessment of Hepatitis C Screening Strategies in Different Community Settings in a Canadian Metropolitan Area



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BACKGROUND

- In 2016, Canada signed on to the World Health Organization (WHO)'s Global Viral Hepatitis Strategy, with the goal of eliminating viral hepatitis as a public threat by 2030
- It is estimated that over 45% of individuals with chronic hepatitis C virus (HCV) infection in Canada remain undiagnosed
- Scaling up HCV screening and linkage to care programs is essential to achieve WHO's targets
- Understanding current rates of HCV diagnosis and linkage to care in different community settings is critical information for developing future screening strategies

OBJECTIVE

- To evaluate HCV screening strategies implemented in three different community settings as part of our Viral Hepatitis Care Network (VIRCAN) program: emergency department (ED), medical walk-in clinic and community outreach

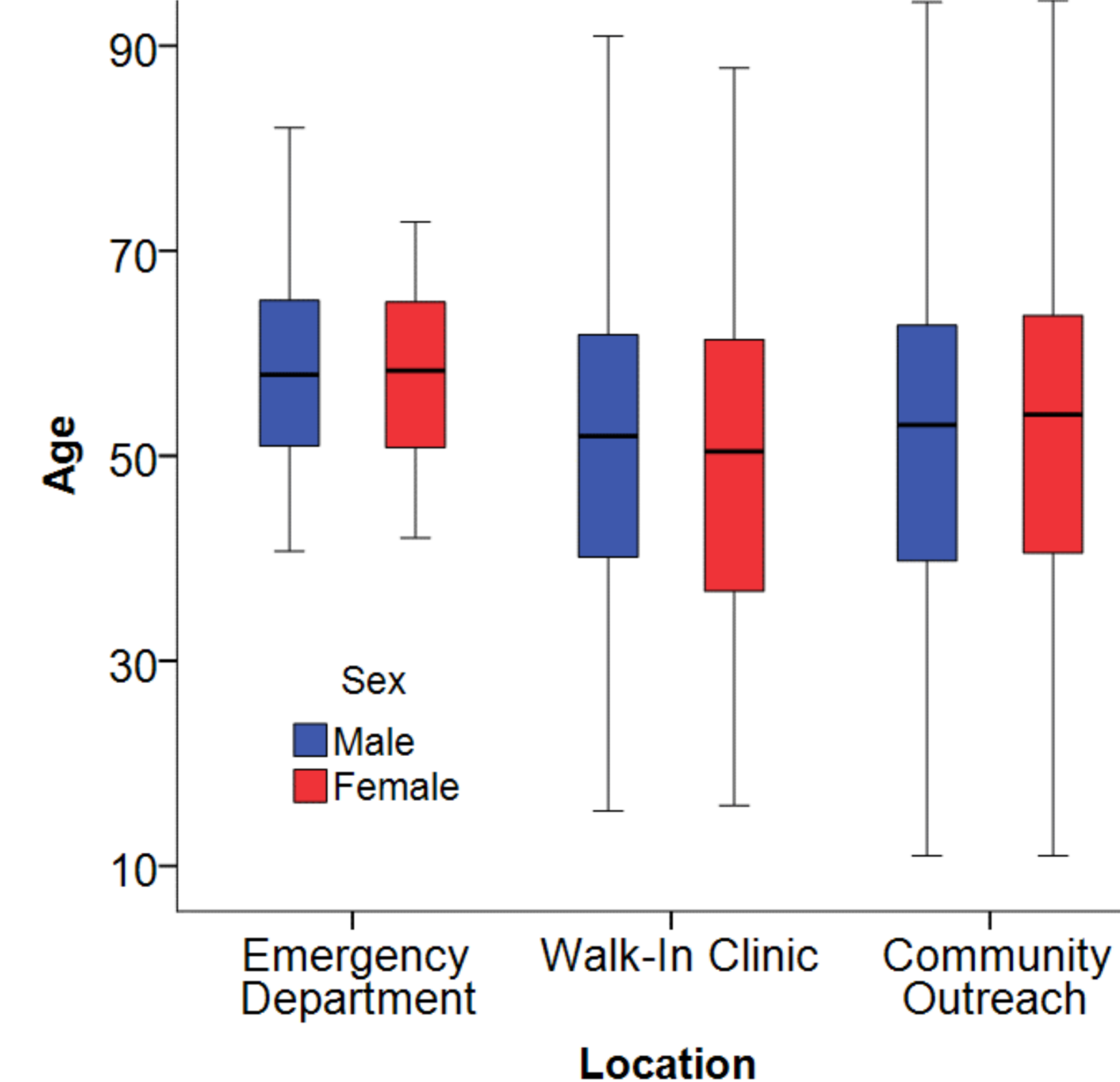
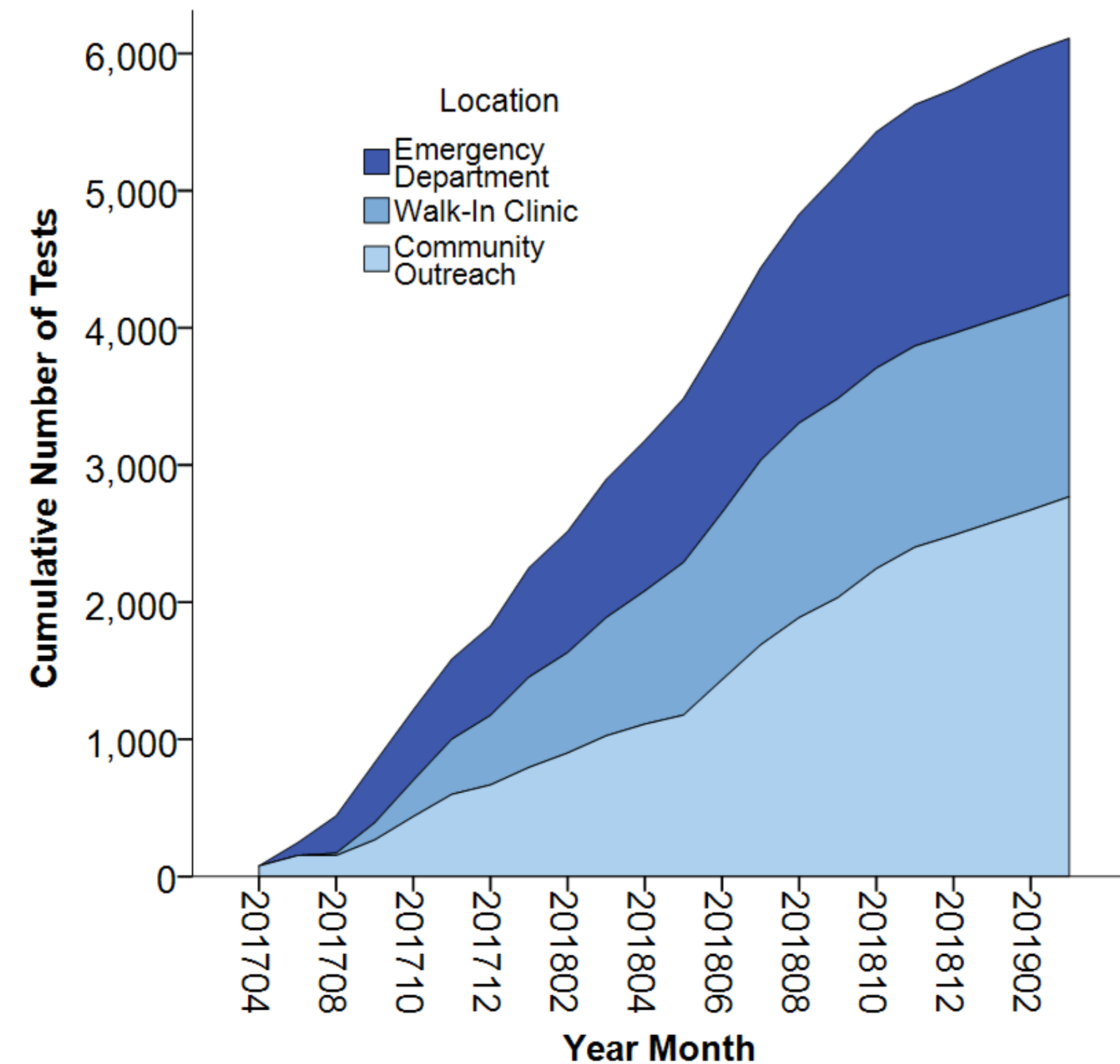
METHODS

- We implemented birth cohort (1945-1975) HCV testing in the ED and medical walk-in clinic, and universal testing during community outreach
- Blood samples in the ED were collected by finger prick on Dried Blood Spot (DBS) collection cards and tested for anti-HCV with reflex to HCV RNA
- In the medical walk-in clinic and community outreach, we used anti-HCV point-of-care testing followed by HCV RNA on DBS card
- Patients with positive HCV RNA were linked to care

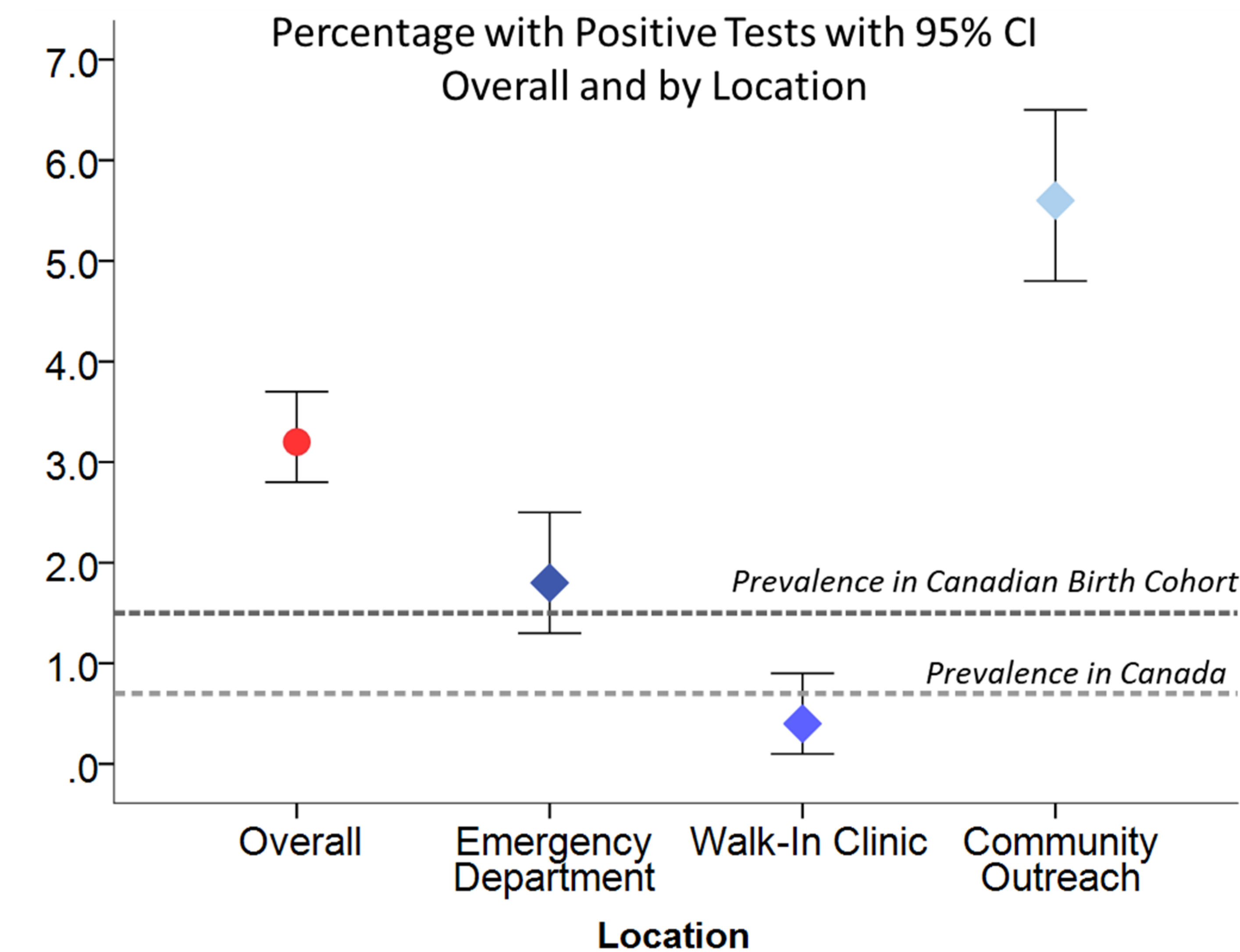
ACKNOWLEDGEMENTS

RESULTS

Characteristics	HCV Ab tests				p-value
	Total N = 6118	Emergency Department N = 1870 30.57%	Walk-in Clinic N = 1473 24.08%	Community Outreach N = 2775 45.36%	
Age (mean, SD)	53 (14)	58 (9)	50 (15)	52 (15)	<0.0001
Age (median IQR range)	56 (11-97)	58 (40-82)	51 (15-97)	54 (11-97)	<0.0001
Male n (%)	2780 (45.4)	976 (51.7)	599 (40.7)	1214 (43.7)	<0.0001
HCV Ab Positives n (%)	196 (3.2)	34 (1.8)	6 (0.4)	156 (5.6)	<0.0001
HCV RNA Tests n/HCV Ab positives (%)	167/196 (85.2)	31/34 (91.2)	5/6 (83.3)	131/156 (84.0)	0.69
HCV RNA Positives n/HCV RNA tests (%)	114/167 (68.3)	23/31 (74.2)	4/5 (80.0)	87/131 (65.4)	0.62
Linkage to Care n/HCV RNA positives (%)	105/114 (92.1)	19/23 (82.6)	3/4 (75.0)	83/87 (95.4)	1.00



HCV Ab Positives	Total	Emergency Department	Walk-in Clinic	Community Outreach
n (%)	196 (3.2)	34 (1.8)	6 (0.4)	156 (5.6)
EXACT 95% CI	2.8-3.7	1.3-2.5	0.1-0.9	4.8-6.5
Compared to general Canadian population 0.7%	<0.0001	<0.0001	0.11	<0.0001
Compared to US Emergency Department 10.3%	<0.0001	<0.0001	<0.0001	<0.0001
Compared to Canadian birth cohort population 1.5%	<0.0001	0.15	<0.0001	<0.0001



CONCLUSIONS

- The HCV prevalence in the community outreach and ED was significantly higher than the general Canadian population.
- Using the DBS for HCV testing ensured a high HCV RNA test uptake
- Screening efforts in populations with higher prevalence, such as the ED and outreach programs, resulted in higher yield and good linkage to care

CONTACT INFORMATION

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