

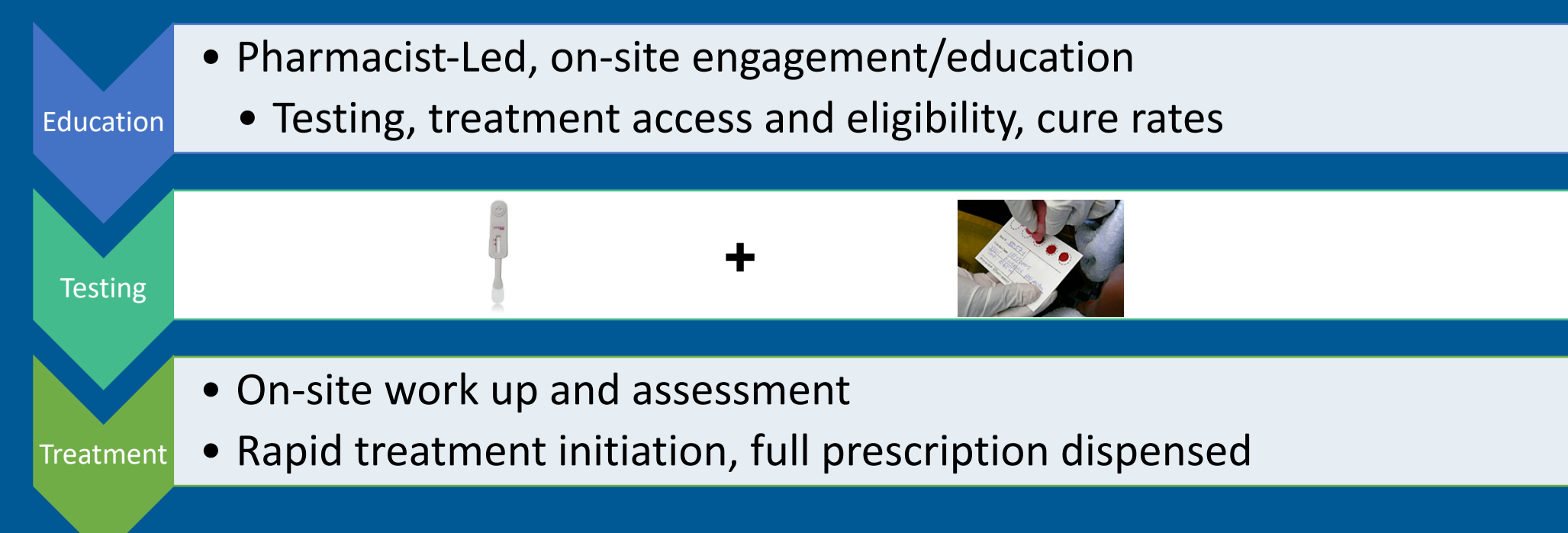
## INTRODUCTION

Task-shifting of both HIV PrEP and Hepatitis C Virus (HCV) treatment will be important in order to increase access in the community and decrease wait times; as well as promote self- and non-physician referral. Although non-specialist providers (GPs/NPs/RNs) have been shown to safely and effectively provide HIV PrEP and HCV treatment, pharmacists are well positioned to accommodate walk-ins as well as serve patients already being seen for other reasons within the pharmacy especially in smaller urban or rural settings. Whether it be within a pharmacy, rural clinic, or in outreach, pharmacists under medical directives in Ontario are able to provide comprehensive care. A recent US study demonstrated the feasibility of a pharmacist-run PrEP clinic, and pharmacists in Alberta now prescribe HCV treatment. However, to date, no study has examined the uptake of these models in Ontario.

## METHODS

The community pharmacist in Southwestern Ontario received referrals from primary care, specialists in rural communities, public health units, self-referrals, or through testing in outreach. Outreach testing in the context of HCV described below (Figure 1). Individuals were seen for intake in the pharmacy, in outreach, in rural clinics, or in the context of a home visit. The pharmacist completed a history, conducted laboratory investigations and comprehensive drug interaction reports which were reviewed before prescribing. In Ontario, the pharmacist requires medical directives to administer vaccines funded by Public Health for hepatitis A and B and HPV to those eligible. Importantly, the pharmacist managed all reimbursement and monitoring during therapy for compliance, side effects and laboratory follow up.

Figure 1.



## RESULTS

- Social media was the greatest referral source for PrEP and outreach for HCV (Figure 2)
- Over an 18 month period the pharmacist completed 21 HIV PrEP and 18 HCV intakes (2 HCV lost to follow-up)

### PrEP

- At present 15 individuals are stably on PrEP (2 or more prescriptions)
- HIV PrEP clinic had high rates of HAV and HBV vaccinations
  - 75% HAV and 66.7% HBV
- 52% of the HIV PrEP clinics did not have a primary care provider (PCP)
- 55% of the clients did not want their PCP to be informed of PrEP initiation

### HCV

- Outreach is a very effective way to incorporate pharmacist-led test and treat models (Figure 3)
- 75% of clients seen in the small urban or rural settings were able to be treated for HCV by the pharmacist (Table 2)
- Of the 18 individuals who were evaluated for HCV:
  - 2 were determined to have compensated cirrhosis (treated)
  - 2 were referred to hepatology for HCC or decompensated cirrhosis
- To date 12/16 clients have completed or nearly completed treatment for HCV, 1 has initiated, with 3 treatment starts pending

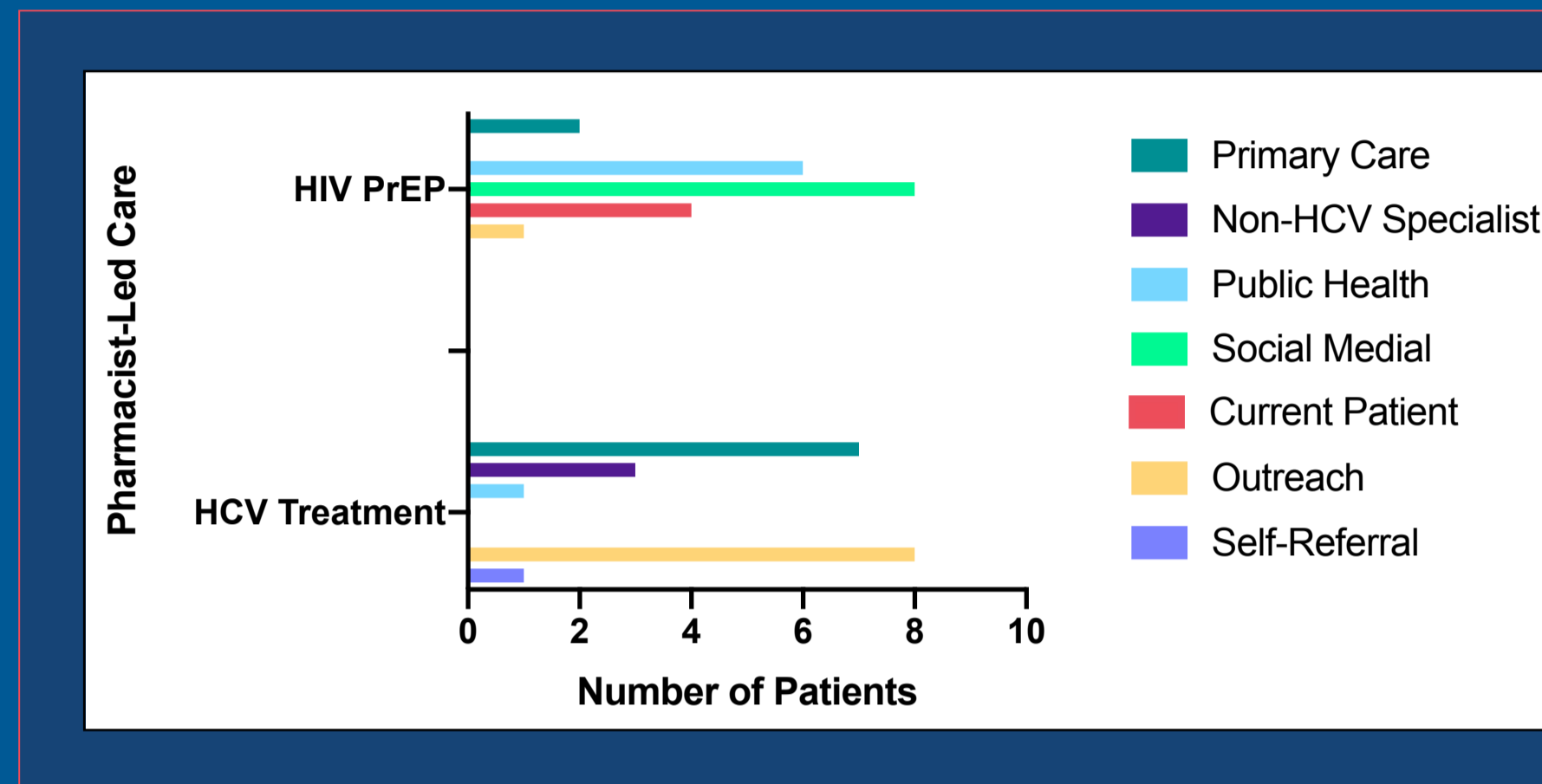


Figure 2. Source of Referral for Pharmacist-Led HIV PrEP and HCV Treatment

Table 1. PrEP Participants Characteristics

Prior PrEP Use	14%
Positive STI at Intake Screening	11%
Positive STI while on PrEP	0%
Immune to HAV at Intake	56%
Vaccinated for HAV in Clinic	33%
Immune to HBV at Intake	83%
Vaccinated for HBV in Clinic	11%
Tobacco Use	14%
Cannabis Use	48%
No Primary Care Provider (PCP)	52%
Not willing to disclose to PCP regarding PrEP	55%

Table 2. HCV Participant Characteristics

	HCV RNA Positive	
	Rural/Small Urban Centre	Outreach
Age	25-64 years	23-45 years
Possible Exposure Types		
Drug use/Positive partner	100%	87.5%
Incarceration	8.3%	25%
Unsafe tattooing	16.6	25%
Lost to Follow-Up	2/12	1/8
Pregnant	0/12	2/8
Non-Cirrhotic (FIB-4/APRI)	9/12	8/8
Cirrhotic	3/12	0/8

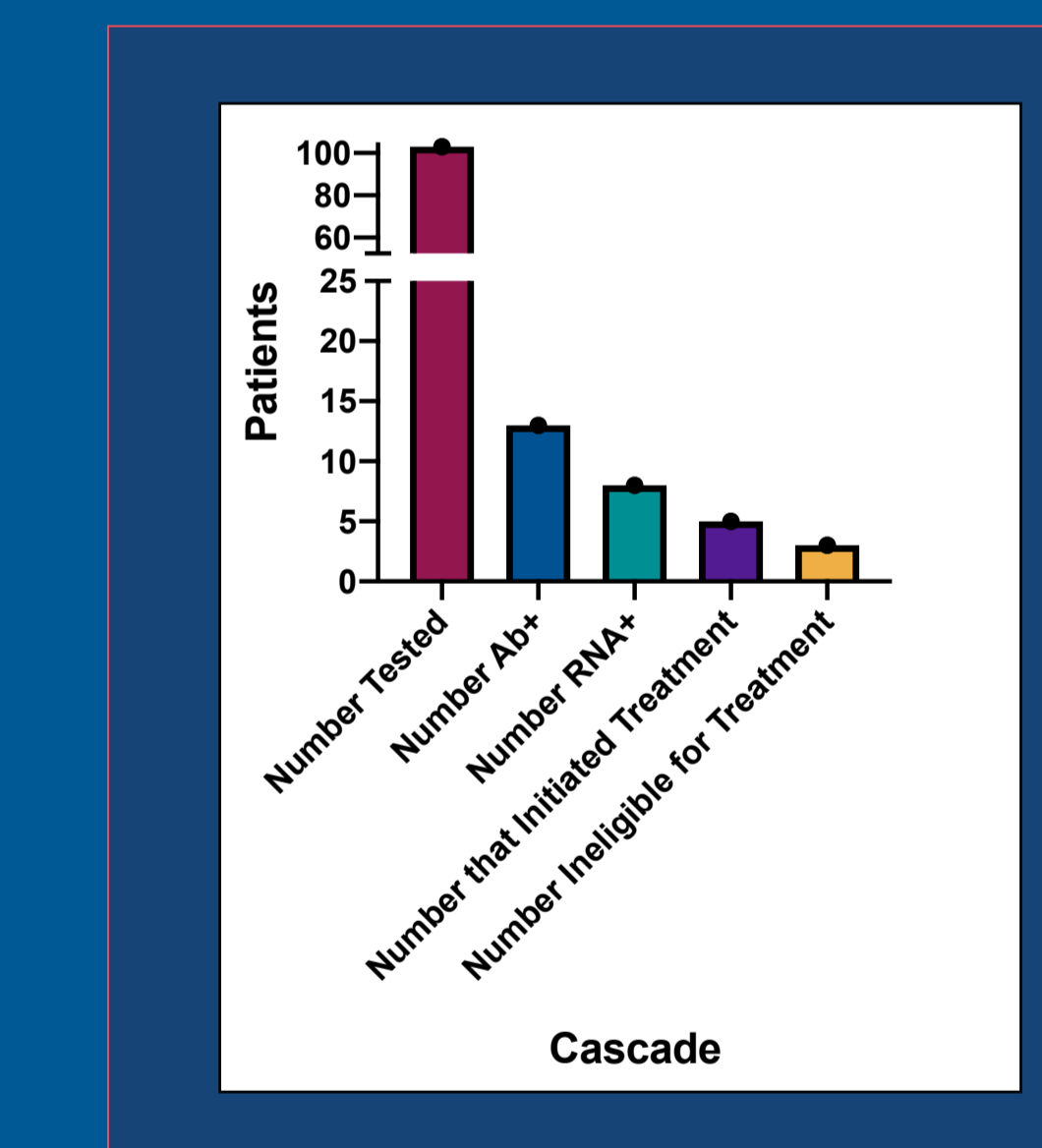


Figure 3. HCV Cascade of Care for Patients Seen in Outreach

## CONCLUSIONS

- Pharmacist-led PrEP and HCV treatment allowed for rapid access to care; with the ability for flexibility including outreach, accommodating walk-ins, self-referrals, and next day visits
- Pharmacists with proper training can engage in point-of-care testing, provide counselling, complete intakes, order laboratory investigations, vaccinate patients, navigate reimbursement, complete drug-drug interactions, and dispense for both HIV PrEP and HCV treatment
- This model leads to high-engagement among patients: 71% retention for HIV PrEP and 85% for HCV
- Pharmacist-led HIV PrEP and HCV treatment is likely suited for many environments; however our evaluation specifically demonstrated the utility of this model in regions which do not otherwise have easy access to this type of low-barrier and local, non-specialist care

## ACKNOWLEDGEMENTS

We would like to thank the many organizations and service and healthcare providers that assist us by increasing awareness among patients, providing outreach spaces, supporting case management, and community specialists who have been flexible for procedures.

We would also like to thank Helen Lathouris, an outreach worker on our team for her enthusiasm and dedication to increase HIV PrEP and HCV education and outreach.

## CONTACT INFORMATION

Mia Biondi, PhD, NP-PHC  
mbiondi@uwo.ca