Strategic co-localization of HCV testing with COVID-19 vaccination to enhance engagement among priority populations

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TORONTO CENTRE FOR LIVER DISEASE

UHN Toronto General Toronto Western Princess Margaret Toronto Rehab

VIRCAN VIRAL HEPATITIS CARE NETWORK

Land acknowledgement

We would like to acknowledge the traditional custodians of the land where we live and work including the Mississaugas of the Credit, the Anishnabeg, the Chippewa, the Haudenosaunee and the Wendat peoples and this land is now home to many diverse First Nations, Inuit and Métis peoples and express our gratitude to the community and Elders past and present.

Disclosure of interest

Personal disclosures - none

Grants

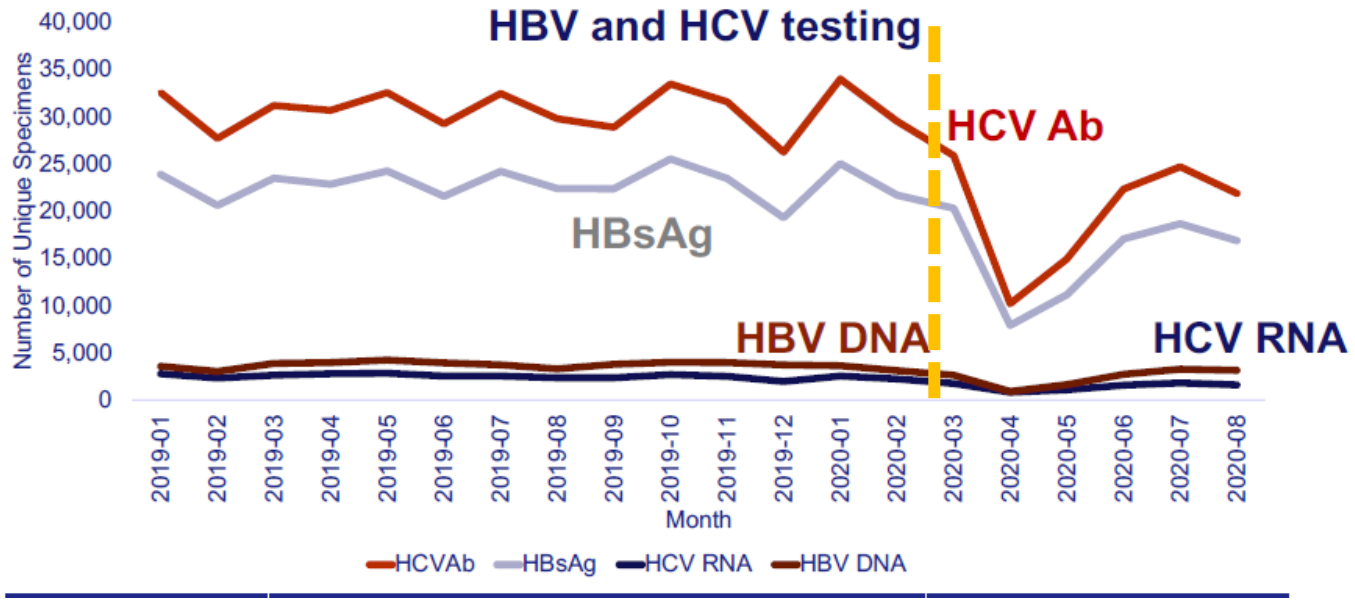
- AbbVie
- Gilead

80+
community partners

48,000+
Canadians tested for viral hepatitis by our network since 2016

Viral Hepatitis Care Network (VIRCAN)

COVID-19 interrupted HCV testing



- Significant reduction in testing volumes (▼~33%)
- Volumes <u>do not</u> return to pre-pandemic levels by the end of August 2020

Mandel et al. (2020) poster presented at Canadian Liver Meeting and the International Liver Conference

Pandemic → syndemic

- 50%+ ▲ overdoses
- Dislocation from services
- Toxic drug supply

Human wall around encampment to protest displacement

Aims

- Evaluate the feasibility of hepatitis C testing combined with COVID-19 vaccination

Large mental health hospital

Outpatients and members of the public

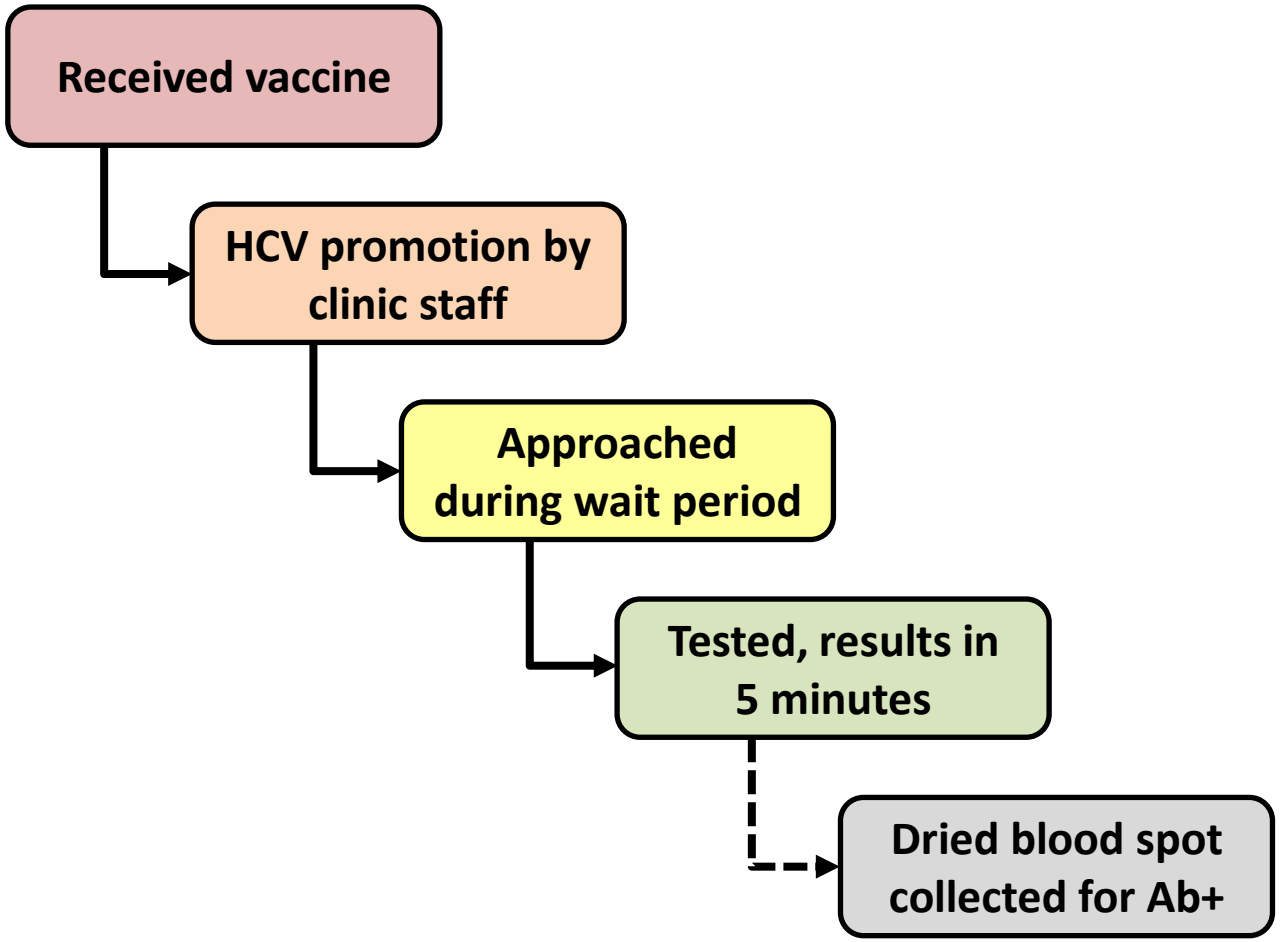
Toronto, Ontario

OAT Clinic

Patients and household members

North Bay, Ontario

Testing flow at vaccine clinics



HCV Ab POC testing workflow

Finger prick

Anti-HCV POCT

Results in **5 minutes**
(VIRCAN 5-Minute Rule)

HCV RNA using DBS card

Results in **1-2 weeks**

Same-day phone call with provider or treatment nurse

Smookler et al. (2020) Clin Gastro Hep

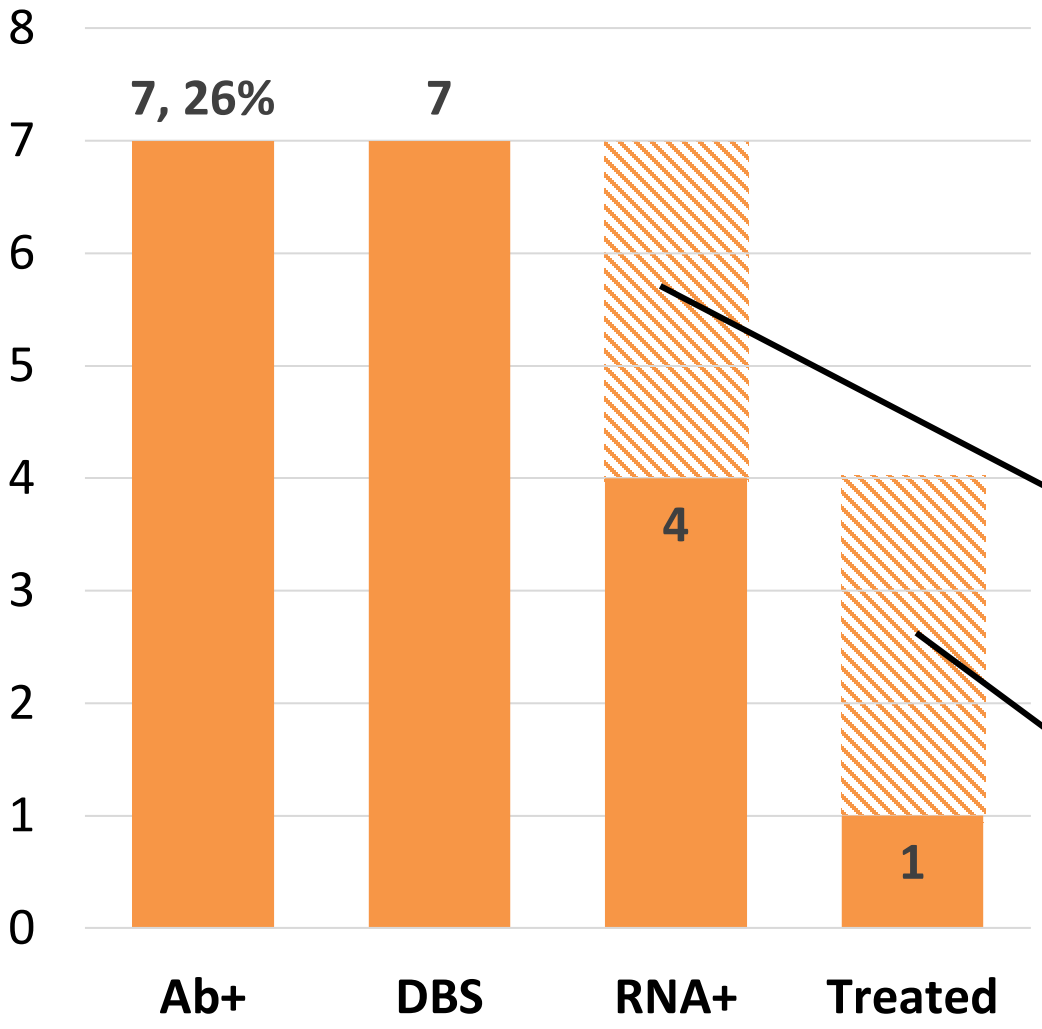
Demographics

	Hospital	OAT
Vaccine Doses	11923	150
Approached	4618 (39%)	150 (100%)
HCV Ab POCT	2317 (50%)	27 (18%)
Avg. Age (yrs)	42	37
Male (%)	46.2	66.6

- **79%** members of the public
- **12%** staff
- **9%** outpatients

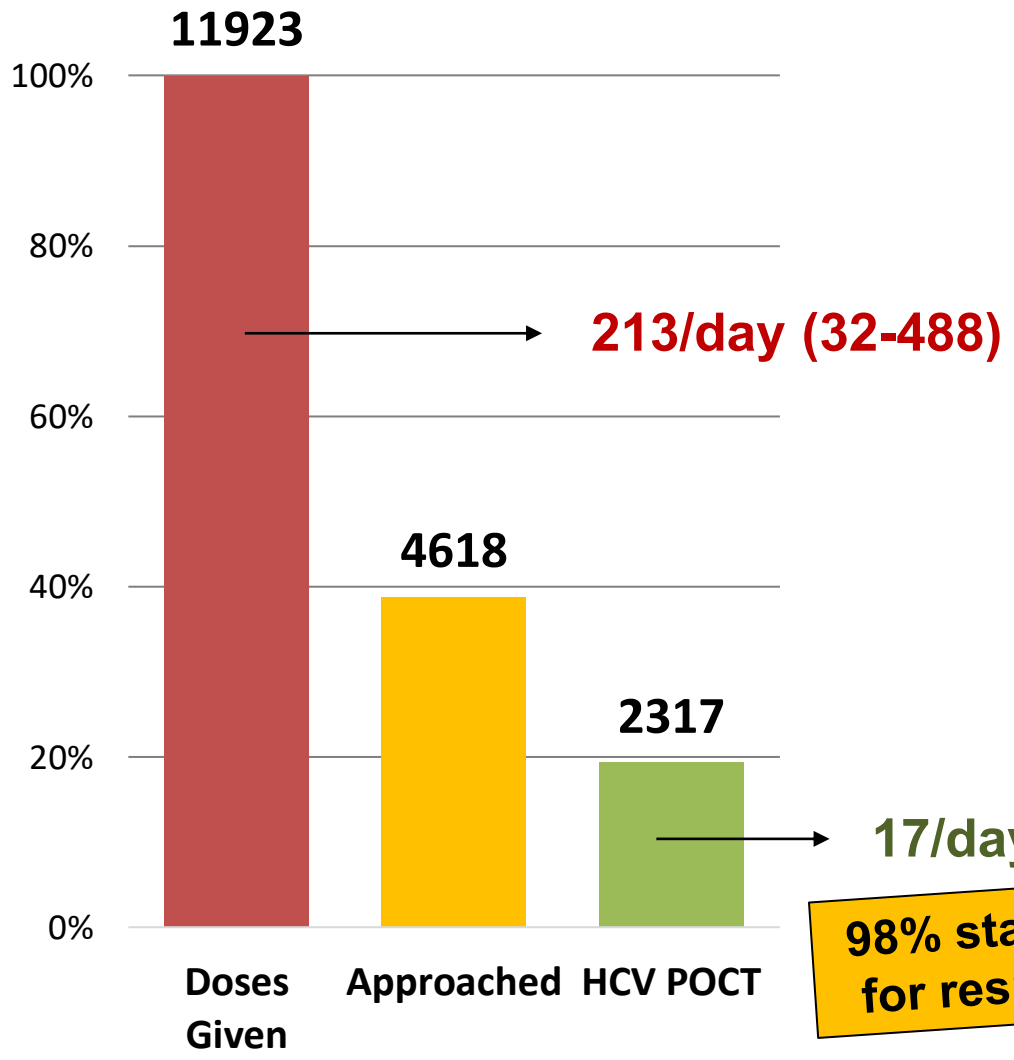
89% had no knowledge of receiving a prior HCV test

OAT clinic: Diagnosis and linkage to care



- 7 Ab+ (26%)
- Re-engagement of known cases
- 2 tested for re-infection
- 1 invalid sample
- 2 pending treatment
- 1 LTFU

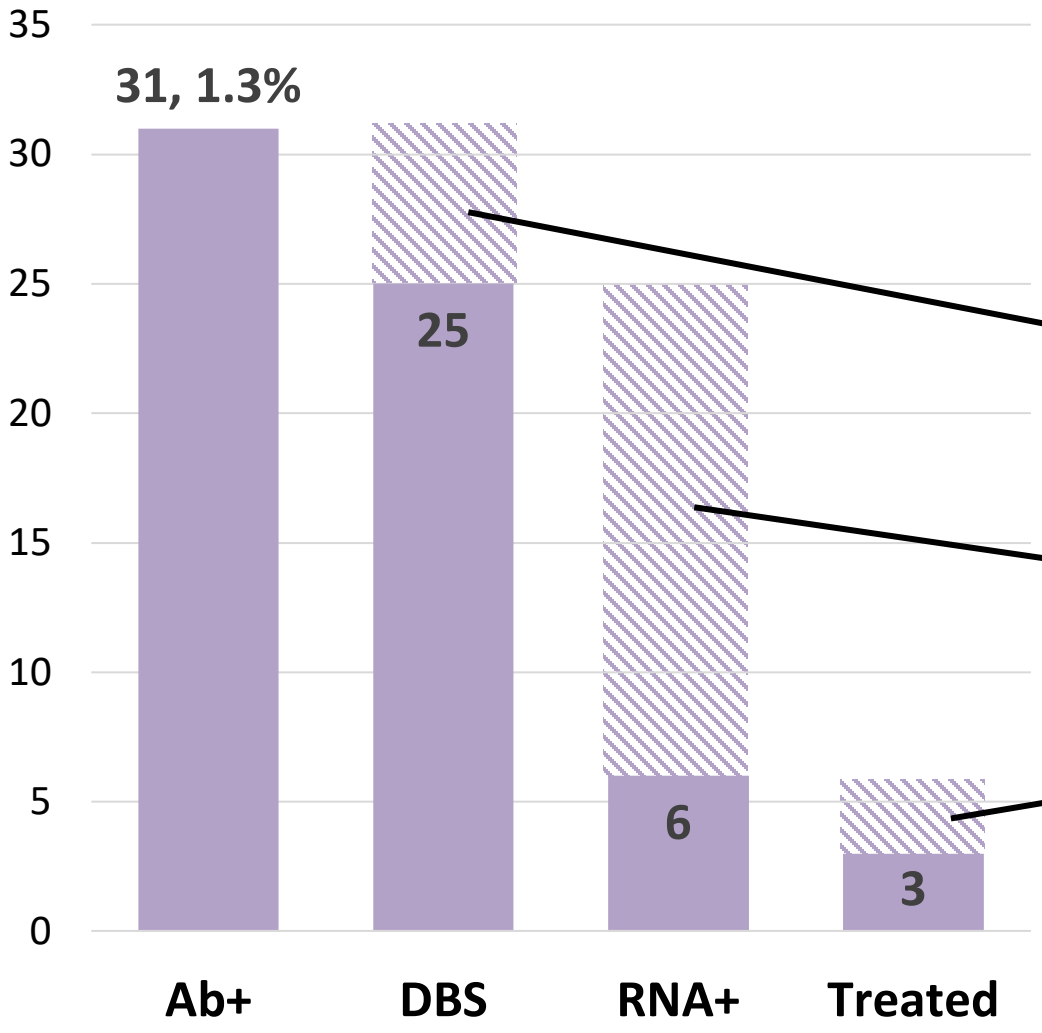
Recruitment at CAMH vaccine clinic



Reasons for refusal:

- "Not interested"
- "Overwhelmed/vaccination is all I can handle today"
- "I don't like needles/fingerprick"
- "Tested elsewhere"
- "Tested here before"

CAMH: Diagnosis and linkage to care



- 31 Ab+ (1.3%)
- 3 Ab+ after 5 minutes
- 3 refused DBS
- Low reinfection rate
- 2 LTFU
- 1 pending treatment

CAMH: Antibody prevalence among groups

Gender	Tested *n (%)*	Ab+ *n (%)*
Men	1073 (46.3)	20 (1.9)
Women	1220 (52.7)	11 (0.8)
Trans/Intersex/ Genderfluid	24 (1.0)	0 (0.0)

Age years	Tested *n (%)*	Ab+ *n (%)*
< 35	959 (41.4)	9 (0.9)
35-45	448 (19.3)	6 (1.3)
46-76	859 (37.1)	16 (1.8)
77+	51 (2.2)	0 (0.0)

Group	Tested *n (%)*	Ab+ *n (%)*
Public & Staff	1696 (73.2)	17 (1.0)
Patient	192 (8.3)	5 (2.6)
Unknown	429 (18.5)	9 (18.4)

Challenges

- Outpatient recruitment was lower than expected
- Linkage to care still a challenge
- Safety in context of COVID
- Mixed response to incorporating it in other vaccine clinics

Conclusions

- Leverages resources put into the fight against COVID to address other public health challenges
- May allow us to overcome some of the dropoff of testing and linkage to care that has occurred due to the pandemic
- Can be done with a small footprint
- Enables reaching and re-engaging populations with a tenuous link to the healthcare system
- POCT with the 5-Minute Rule followed by DBS sample collection allows high throughput and ensures complete diagnosis