

Characterizing PrEP awareness and use among Gay, Bisexual and other Men who have Sex with Men (GBM) in Vancouver, Toronto and Montreal



Jordan M. Sang (1), David M. Moore (1, 2), Lu Wang (1), Justin Barath (1), Shayna Skakoon-Sparling (3), Joseph Cox (4,5), Gilles Lambert (5,6), Syed W. Noor (3, 7), Daniel Grace (8), Jody Jollimore (9), Mark Hull (1,2), Herak Apelian (4,5) Allan Lal (1), Abbie Parlette (4), Trevor A. Hart (3,8), Nathan J. Lachowsky (9,10)

(1) British Columbia Centre for Excellence in HIV/AIDS, Vancouver, BC. (2) University of British Columbia, Vancouver, BC. (3) Ryerson University, Toronto, ON. (4) Research Institute of the McGill University Health Center, Montréal, QC. (5) Direction régionale de santé publique -Montréal, CIUSSS Centre-Sud-de-l'Île-de-Montréal, Montréal, QC. (6) Institut national de santé publique du Québec, Montréal, QC. (7) School of Human Sciences, Louisiana State University Shreveport, Shreveport, USA. (8) University of Toronto, Toronto, ON. (9) Community Based Research Centre, Vancouver, BC. (10) University of Victoria, Victoria, BC

Presenting author contact information: jsang@bccfe.ca

CONFERENCE
CAHR
2021

Introduction

- HIV pre-exposure prophylaxis (PrEP) was approved by Health Canada in Feb 2016 (Hull & Tan, 2017)
- Barriers to and accessibility of PrEP in Canada are complex due to provincial and territorial health differences in planning and delivering and funding (Yoong, 2019)
 - BC: Full coverage for eligible individuals since Jan. 1, 2018
 - ON: Coverage via private insurance or drug assistance plans for low income and other eligible individuals (e.g., <25 or >65 years) since Sept. 28, 2017
 - QC: Full coverage with co-payment since Feb. 28, 2016
- Study aims to **1) examine trends of PrEP awareness and use**, and **2) factors associated with PrEP awareness and use** among a pooled sample of Canadian GBM

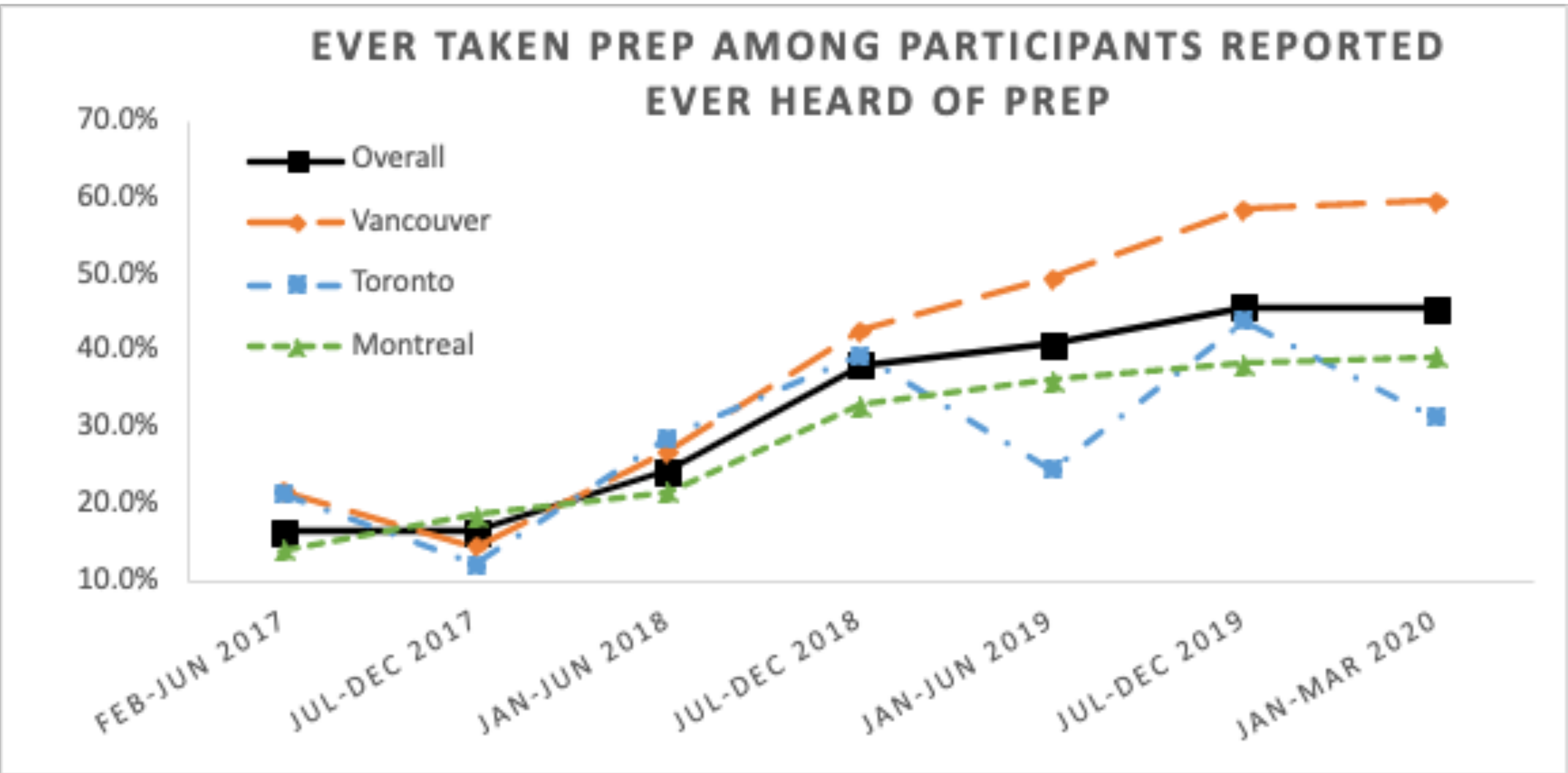
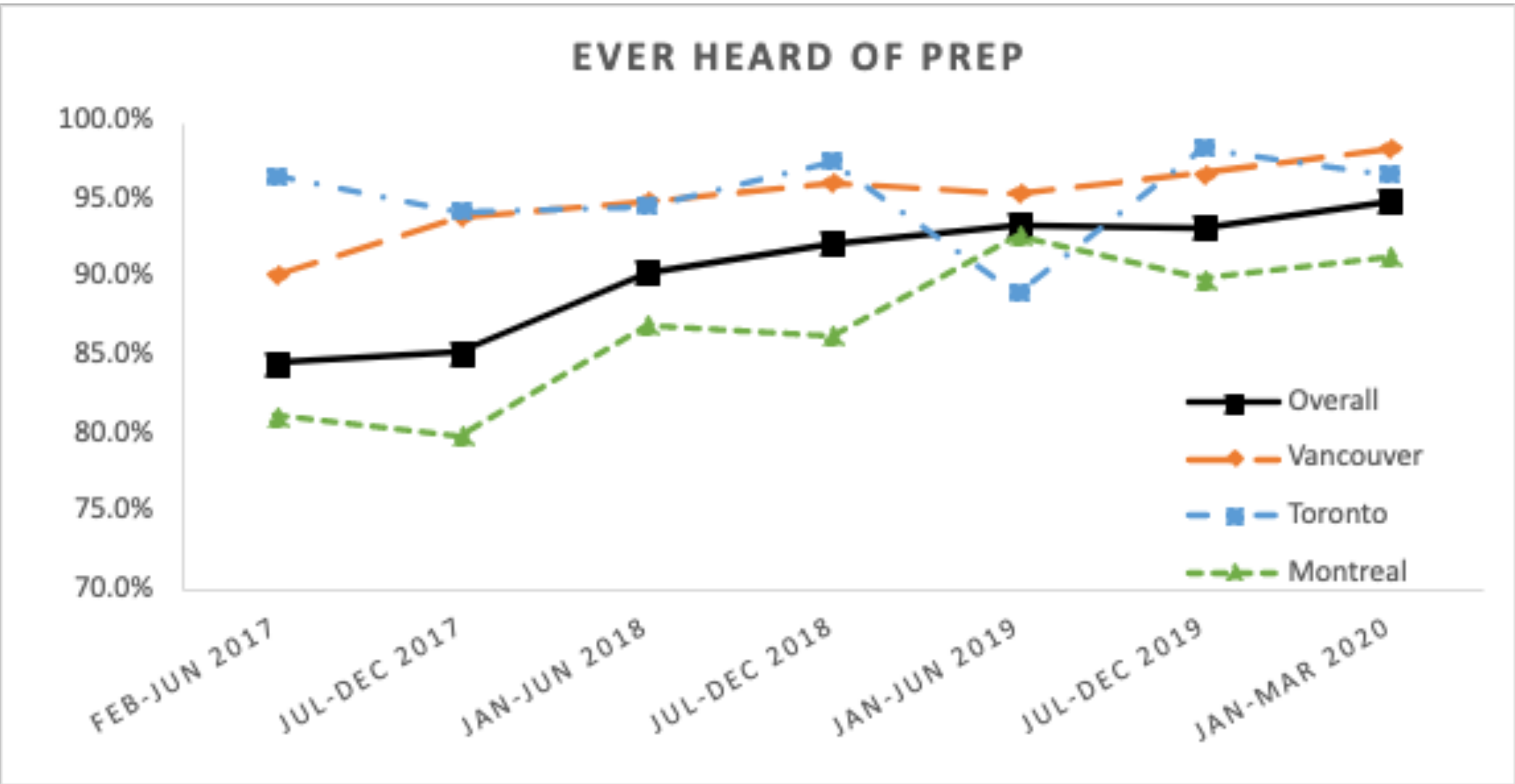
Methods

- Participants were recruited using respondent-driven sampling (RDS) into the Engage Study, a longitudinal, bio-behavioural cohort study of GBM in Vancouver, Toronto, and Montreal.
- Eligibility: ≥16 years of age; identify as a man, including transmen; live in Vancouver, Toronto, or Montreal; report sex with another man in the past 6 months; be recruited into the study or seed participant.
- Data from February 2017-March 2020
- Study visits include questions on ever heard of PrEP and ever used PrEP
- Participants completed questions on self-reported PrEP awareness and use
- We used generalized estimating equations (GEE) with three-level RDS data (RDS chain, participant-level, visit-level) to evaluate temporal trends
- We used multivariable GEE to identify correlates of PrEP awareness and use and used backward selection to minimize QIC.

PrEP use nearly tripled overall among HIV-negative/unknown GBM in Vancouver, Toronto and Montreal from 16.6% (February 2017) to 45.6% (March 2020)

Results:

N=2008 HIV-negative/unknown GBM (n=622 from Vancouver, n=418 from Toronto, and n=968 from Montreal)



Awareness of PrEP increased significantly in all three sites:

- Montreal, 81.2% during the first 6-month period to 91.4% during the last 6-month period ($p<0.001$)
- Toronto, 94.2% to 96.6% ($p=0.036$)
- Vancouver, 90.2% to 98.3% ($p<0.001$)
- Overall: from 84.5% to 94.9% ($p<0.001$)

Use of PrEP increased significantly in all three sites:

- Montreal, 14.2% during the first 6-month period to 39.3% during the last 6-month period ($p<0.001$)
- Toronto, 21.4% to 31.4% ($p<0.001$)
- Vancouver, 21.7% to 59.5% ($p<0.001$)
- Overall: from 16.6% to 45.6% ($p<0.001$)

Multivariable Results

GBM in Vancouver had greater odds of PrEP awareness (aOR=1.94; 95%CI=1.32-2.87; $p=0.001$) and PrEP use (aOR=2.05; 95%CI=1.60-2.63; $p<0.001$) compared to GBM in Montreal; results from Toronto were not significantly different from Montreal.

Conclusions

- We found significant increases in overall PrEP awareness and PrEP use among HIV-negative/unknown GBM in Vancouver, Toronto and Montreal
- PrEP awareness was very high among GBM in all three cities over a three-year period (91.4%-98.3%). However, this was not 100%, which was expected given study questions on PrEP at baseline
- PrEP uptake was much higher in Vancouver, compared to Toronto and Montreal (59.5% vs. 31.4% and 39.3%, respectively)
- Multivariable models support findings that awareness and use were higher in Vancouver compared to Montreal
- Full public funding and active health promotion for PrEP in BC may have accounted for these differences
- Findings support policies which increase PrEP accessibility

Acknowledgements

This study is funded by the Canadian Institutes for Health Research (CIHR, #TE2-138299, FDN 143342, PJT-153139), the CIHR Canadian HIV/AIDS Trials Network (#CTN300), the Canadian Foundation for AIDS Research (CANFAR, #Engage), the Ontario HIV Treatment Network (OHTN, #1051), and the Public Health Agency of Canada (#4500370314). TAH is supported by an Endgame Leader Chair Award in Gay and Bisexual Men's Health from the Ontario HIV Treatment Network. DMM and NJL are supported by Scholar Awards from the Michael Smith Foundation for Health Research (#5209, #16863). SSS is supported by CTN and CIHR postdoctoral fellowship awards. DG is supported by a Canada Research Chair in Sexual and Gender Minority Health. Thank you to the Engage participants, staff and volunteers.