## **Comparing PrEP Accessibility and Users in Mid- and Large-Sized Urban Centres**

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### Introduction

- The COVID-19 pandemic has significantly impaired healthcare access both globally and in Canada<sup>1</sup>
- PrEP is a safe and effective means of preventing HIV seroconversion; however, barriers to PrEP access already prevent PrEP initiation and lead to increasing attrition of users over time<sup>2</sup>
- Such barriers are especially impactful to marginalized populations even outside of the COVID-19 pandemic<sup>3</sup>
- Our study thus sought to investigate how the COVID-19 pandemic affected access to PrEP through an intersectional lens, especially among marginalized populations

# Bibliography

- 1. Blumenthal, D., Fowler, E. J., Abrams, M., & Collins, S. R. (2020). Covid-19 Implications for the Health Care System. New England Journal of Medicine, 383(15), 1483–1488.
- Chou, R., Evans, C., Hoverman, A., Sun, C., Dana, T., Bougatsos, C., Grusing, S., & Korthuis, P. T. (2019). Preexposure prophylaxis for the prevention of HIV infection: Evidence report and systematic review for the US preventive services task force. JAMA - Journal of the American Medical Association, 321(22), 2214–2230.
- Hojilla, J. C., Vlahov, D., Crouch, P. C., Dawson-Rose, C., Freeborn, K., & Carrico, A. (2018). HIV Pre-exposure Prophylaxis (PrEP) Uptake and Retention Among Men Who Have Sex with Men in a Community-Based Sexual Health Clinic. AIDS and Behavior, 22(4), 1096–1099.

## Methods

- Our data was collected via the SexNow Survey conducted by the Community-Based Research Centre
- The survey was distributed from August to September 2020, and focused on the time periods during which COVID restrictions were most stringent
- Participants not taking PrEP were excluded from the data pool to focus on changes to PrEP access rather than prior barriers
- Variables regarding PrEP use and access to care were conducted using Likert scale responses, with specific questions probing PrEP affordability, prescription access, ease of discussing PrEP, and access to bloodwork
- Responses were stratified by variables including province, ethnicity, and age, with data reviewed by authors to assess for trends and Chi-squared testing performed for significance

Analysis was dually completed in SAS 9.4 and R 4.0.5



#### Results – Demographics and Bloodwork Access

Age	Mean 42, Median 40	Frequency	Percent	
Ethnicity	White	346	72.84	
	Racialized	95	20	
Province	Alberta	60	12.55	
	British Columbia	166	34.73	
	Manitoba	7	1.46	
	New Brunswick	1	0.21	
	Newfoundland	4	0.84	
	Nova Scotia	11	2.30	
	Ontario	154	32.22	
	Quebec	66	13.81	
	Saskatchewan	9	1.88	

	Bloodwork Access					
Province	Same	Easier	Harder	X <sup>2</sup>		
Alberta	23	0	37	0.40		
British Columbia	80	2	82			
Manitoba	3	0	4			
New Brunswick	1	0	0			
Newfoundland	1	0	3			
Nova Scotia	3	0	8			
Ontario	65	0	86			
Quebec	31	1	32			
Saskatchewan	4	0	5			

Table 2: Province and access to bloodwork

N.B. while trends were not significant between provinces, all had greatly increased difficulty accessing bloodwork

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Table 1: Survey demographics of those on PrEP

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#### Results – Province and Racialization Impacts on PrEP Access

	Ethnicity	Easier	Harder	About the same	χ <sup>2</sup>
Affordability	White	1	49	290	0.0279*
	Racialized	0	23	70	
Accessing a	White	28	113	200	0.4205
prescription	Racialized	9	37	48	
Taking PrEP	White	12	29	298	0.0679
	Racialized	1	15	78	
Getting bloodwork	White	1	186	154	0.7049
	Racialized	2	53	39	
Contacting a	White	16	105	221	0.191
healthcare	Racialized	2	37	55	
professional					

Table 3: Ethnicity and access to PrEP

Province		Affordability				Prescription Access			
	Same	Easier	Harder	Same	Same	Easier	Harder	X <sup>2</sup>	
Alberta	54	0	6	0.011*	32	2	26	0.017*	
British Columbia	152	1	9		82	15	67		
Manitoba	3	0	4		6	0	1		
New Brunswick	1	0	0		1	0	0		
Newfoundland	3	0	1		1	1	2		
Nova Scotia	8	0	3		3	1	7		
Ontario	109	0	42		95	15	41		
Quebec	48	0	16		43	4	17		
Saskatchewan	9	0	0		8	0	1		
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#### **Discussion and Conclusions**

- The majority of respondents experienced additional challenges taking PrEP or discontinued it altogether
- Bloodwork access posed the greatest additional challenge, followed by accessing
  prescriptions and contacting healthcare professionals; this is likely a result of the
  closures of physical clinics and in-person restrictions, and would benefit from novel
  healthcare delivery initiatives
- Individuals in British Columbia noted the least difficulty affording PrEP, logically given province-wide coverage and illustrating effective public-health strategies
- Interestingly, individuals in Alberta and BC had greater difficulties obtaining PrEP prescriptions than those in Ontario and Quebec
- Younger individuals had greater difficulty accessing PrEP, especially in the context of affordability and prescription access

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• Racialized individuals had significantly greater difficulty affording PrEP, but no significantly greater difficulty contacting healthcare professionals despite known barriers in this regard, illustrating potential benefits of virtual healthcare delivery

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