

One Year of Population-Based HIV Pre-Exposure Prophylaxis (PrEP) in British Columbia: Program Uptake and Participant Characteristics

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Background

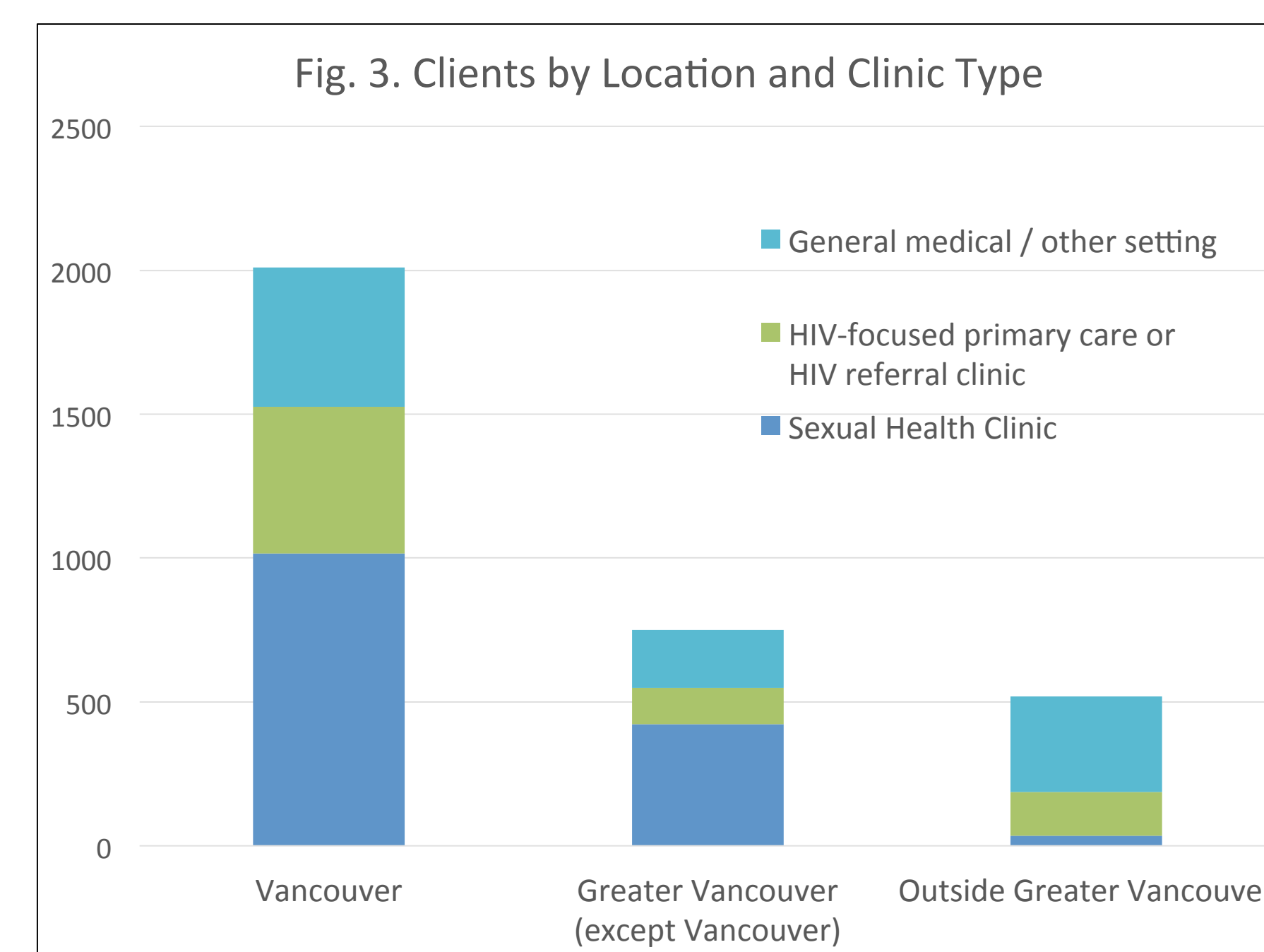
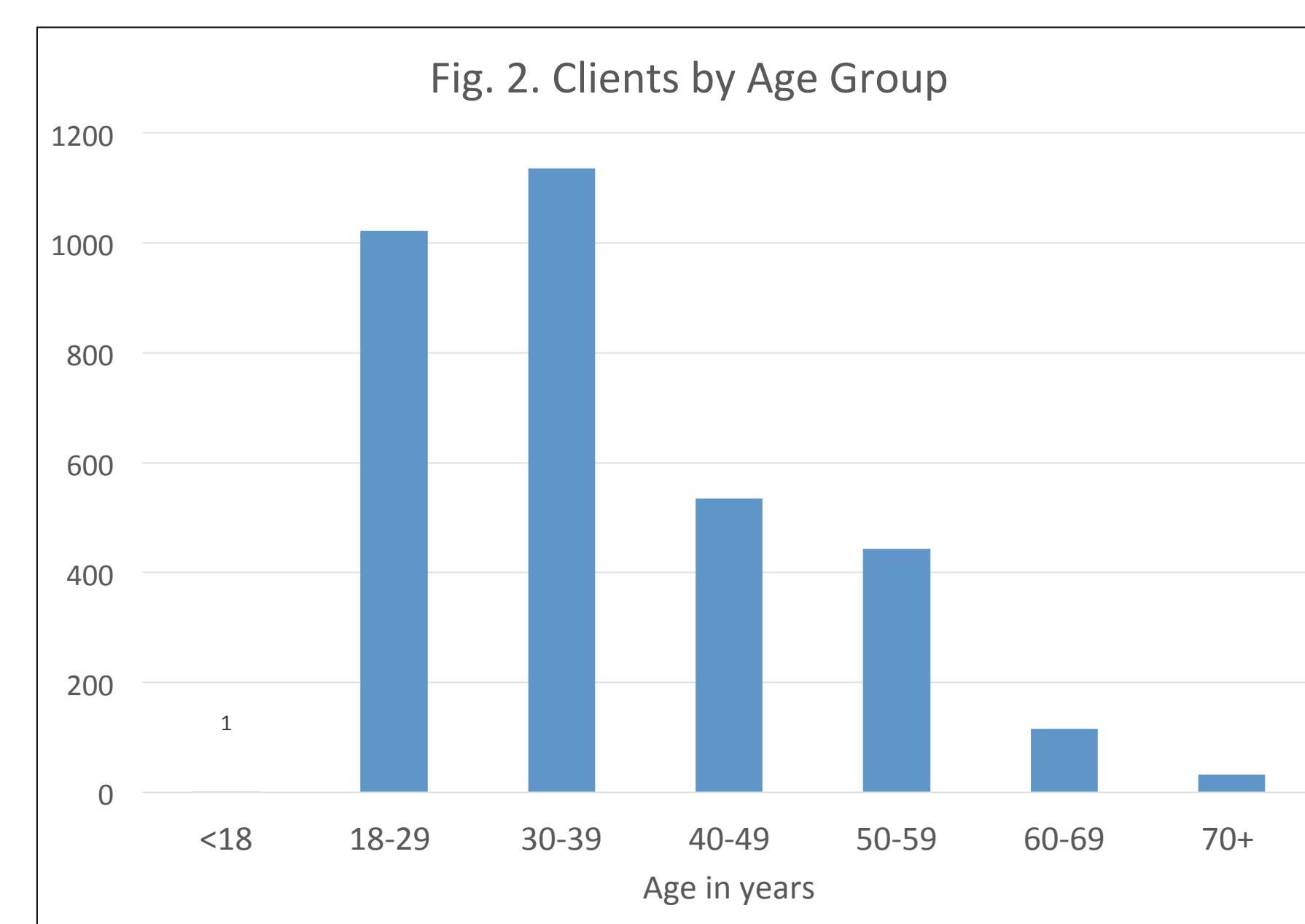
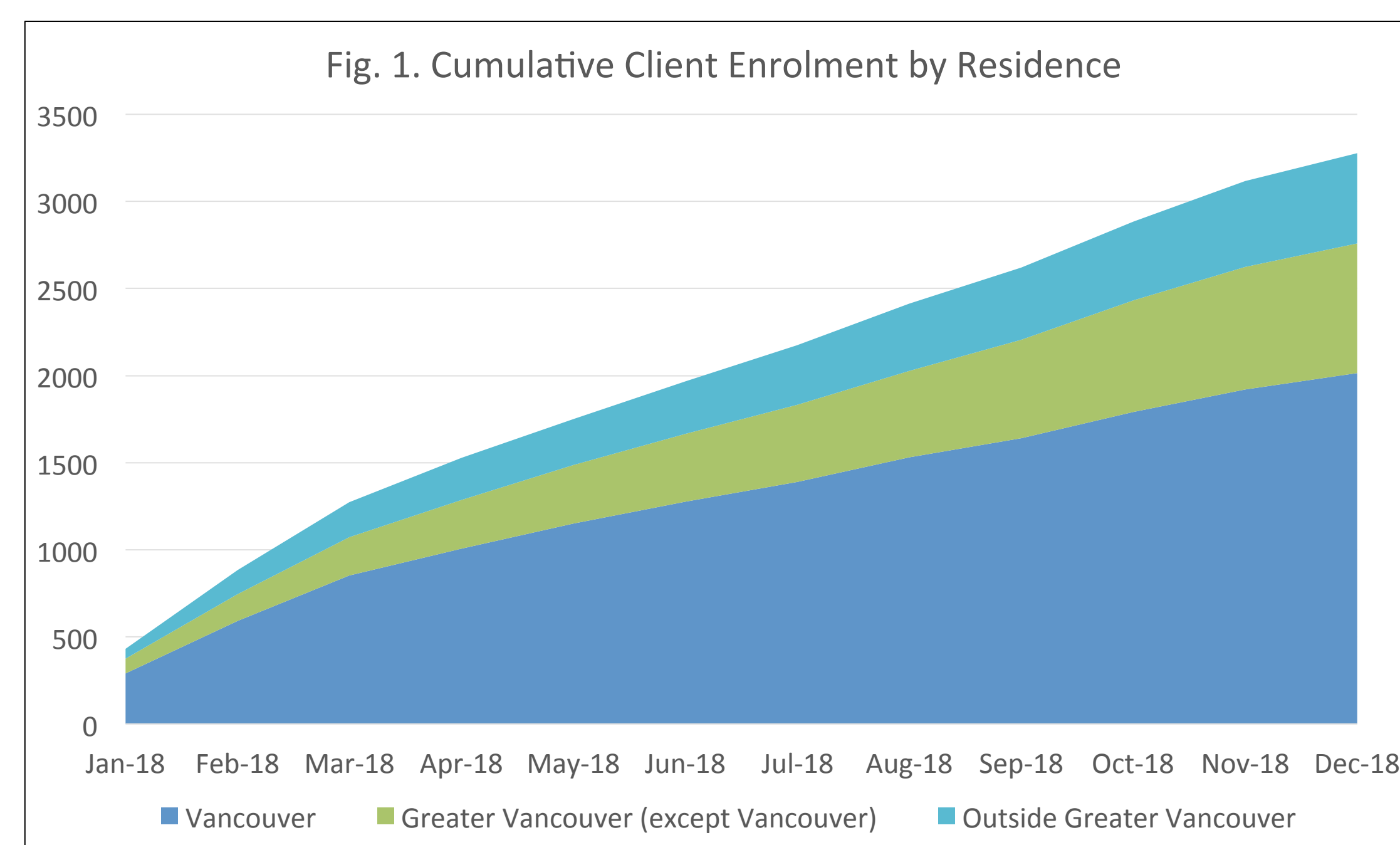
The BC Centre for Excellence in HIV/AIDS (BC-CfE) centralized HIV PrEP program was launched January 2018. PrEP is available at no charge to BC residents at high risk of HIV infection according to BC PrEP Guidelines. We describe program uptake and participant characteristics in the first year.

Methods

- Persons enrolled in the BC PrEP program 1-Jan-2018 through 31-Dec-2018 were characterized by clinical and demographic characteristics and HIV acquisition risk factor(s).
- Client outcomes at end of follow-up (31-Mar-2019) including reported PrEP discontinuation, adverse reactions, and HIV seroconversion were summarized.

Results

- 3284 persons enrolled during the first 12 months with a median monthly uptake of 236 (range 163-451) (Fig.1).
- The majority of clients were male (98%), under the age of 40 (66%) and naïve to PrEP at enrolment (81%).
- Most participants resided in Greater Vancouver (84%) and 2.3% in a rural location.
- PrEP care was received in sexual health clinics (45%), HIV-focused primary care or HIV referral clinics (24%), or general medical or other settings (31%).



- Participants were predominantly men who have sex with men (MSM) or transgender women with HIV incidence risk index (HIRI) for MSM ≥ 10 (88%) (Table 2).
- More than one risk factor for HIV acquisition was reported in 27%, including 556 clients (17%) with HIRI-MSM ≥ 10 and prior rectal bacterial sexually transmitted infection or infectious syphilis.
- BC guidelines recommend daily PrEP; however, intermittent or on-demand use was documented for 143 clients (4.4%) and was likely under-reported.
- Adverse drug reaction was reported by 36 participants (1%), of whom 24 discontinued and remained off PrEP at end of follow-up.
- 17% of enrolled clients were no longer active in the program at end of the evaluation period.

Conclusion

The fully-subsidized, population based BC PrEP program saw rapid uptake in the first year, predominantly by at-risk MSM residing in Greater Vancouver who had not used PrEP previously. PrEP was well-tolerated, with few HIV seroconversions in the cohort reported to date. Program retention, and impact of the PrEP program on new HIV infections will be evaluated.

Table 1: Baseline Client Characteristics		N = 3284
Median age (Q1-Q3), years		34 (28-45)
Gender identity, n (%)		
Male		3232 (98.4)
Female		16 (0.5)
Transgender female		23 (0.7)
Transgender male		10 (0.3)
Other gender identity, or unspecified		3 (0.1)
PrEP naïve at enrolment, n (%)		2659 (81.0)
Hepatitis B surface antigen positive, n (%)		30 (0.9)
Mean estimated GFR (SD), mL/min/1.73 m²		99 (16.9)

Table 2: Program-Qualifying Risk Factor(s) for HIV Acquisition*		N = 3284
	n	(%)
Men who have sex with men, transgender women		
HIV Incidence Risk Index for MSM (HIRI-MSM)	10 - 24	2060 (62.7)
	≥ 25	830 (25.3)
Infectious syphilis or rectal bacterial sexually transmitted infection (STI)		689 (21.0)
HIRI-MSM ≥ 10 and infectious syphilis or rectal bacterial STI		556 (16.9)
HIV-positive sexual partner**		206 (6.3)
Recurrent non-occupational post-exposure prophylaxis (NPEP) use		110 (3.4)
Heterosexual men and women who have an HIV-positive sexual partner**		
		19 (0.6)
Persons who inject drugs who have an HIV-positive injecting partner**		
		7 (0.2)
Public health referral following phylogenetic identification of an HIV cluster		
		27 (0.8)
Other risk factors		
		24 (0.7)

* More than one risk factor per client may be reported
** Partner not receiving stable antiretroviral therapy and/or viral load not < 200 copies/mL

Table 3: Client Status at End of Follow-up Period*		N = 3284
	n	(%)
Clients active in PrEP Program		
	2733	(83.2)
Clients no longer active in PrEP Program		
HIV-positive seroconversion**	3	(0.09)
Deceased	1	(0.03)
Moved out of province	17	(0.5)
PrEP discontinuation reported		
No longer at risk / client choice	75	(2.3)
Adverse drug reaction	24	(0.7)
Other	2	(0.06)
Unspecified	25	(0.8)
>6 months since last PrEP prescription	408	(12.4)

* Follow-up until 31-Mar-2019
** Persons not on PrEP at time of HIV diagnosis

Table 4: Reported Adverse Drug Reactions (N=36 clients)		
Symptom Category	n*	Detail
Gastrointestinal	20	diarrhea (6), nausea and/or vomiting (7), general GI upset or pain (10)
CNS	6	dizziness (2), headache (3), insomnia (2), altered mental status (1)
Dermatologic	7	rash (3), eczema (1), skin irritation (1), acne (1), flushing (1)
Renal	6	renal impairment (5), proteinuria (1)
General symptoms	5	fatigue/ malaise (5)
Other/ unspecified	6	neutropenia (1), peripheral neuropathy (1), dysuria (1), unspecified (3)

* Each adverse reaction report may include multiple symptom categories, and more than one symptom type within each symptom category

• BC Centre for Excellence in HIV/AIDS. PrEP Program Information. Found at <http://cfenet.ubc.ca/hiv-pre-exposure-prophylaxis-prep>
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