

Regional differences in use of GetCheckedOnline and client characteristics across British Columbia, Canada



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Introduction

- GetCheckedOnline (GCO) launched in Vancouver, British Columbia (BC), Canada, in September 2014, offering online access to sexually-transmitted infection (STI) testing
- In February 2016, the program expanded to smaller urban, suburban, and rural communities in south central BC (Interior Health Authority) and Vancouver Island (Island Health Authority)
- Regional differences may impact the uptake and use of GCO

Objective

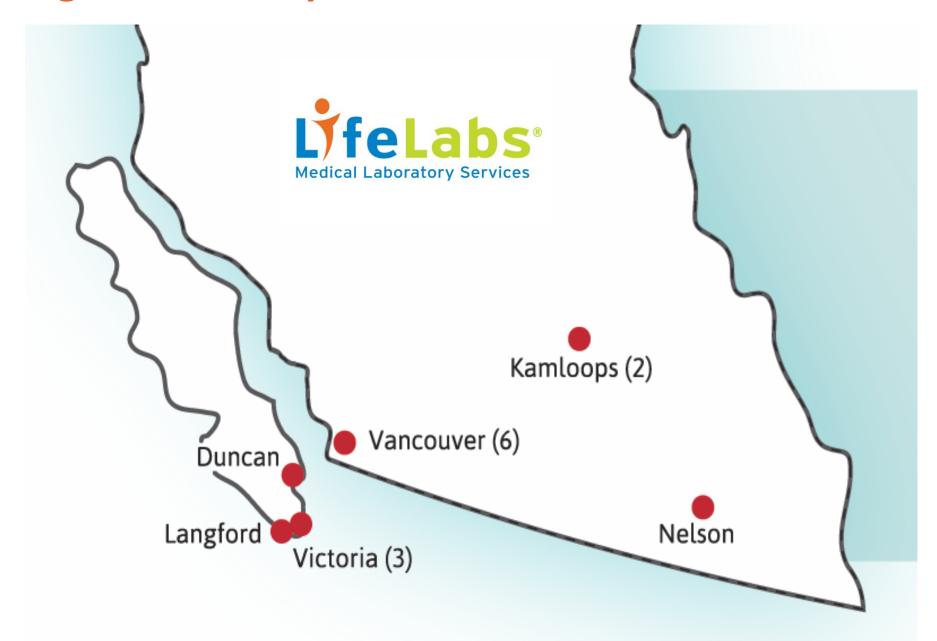
 To examine differences in GCO uptake, client sociodemographics, testing motivation, and sexual health histories between Vancouver and expansion sites during the first 3 years of program expansion

Methods

- GCO program data and laboratory testing data were included from February 2016 to January 2019
- Variables examined include:
- Accounts created and specimens submitted
- Test episode positivity for chlamydia, gonorrhea, syphilis, HIV, and/or hepatitis C
- Client-level characteristics: age, gender, ethnicity, history of STI/HIV testing (as reported at first completed testing episode)
- **Episode-level variables**: symptoms, sexual contact with someone who might have an STI, men who have sex with men (MSM), condomless vaginal or anal sex with >1 partner in past 3 months, number of sexual partners in past 3 months, STI diagnosis in past 12 months

Bivariate analyses comparing Vancouver with each of the expansion regions (Island and Interior) were conducted using chi-square tests

Figure: GCO implementation sites in BC



Results

- During the study period, 6,366 unique clients completed testing, with higher proportions of clients completing testing in Island and Interior health regions compared to Vancouver (**Table 1**)
- In total, 10,635 test episodes were completed and STI positivity was higher in Interior compared to Vancouver
- Compared to Island and Interior health regions, Vancouver clients who had tested were older and greater proportions identified as men and as non-White (Table 2)
- In Vancouver, higher proportions of testers were MSM and reported four or more sex partners
- Greater proportions of testers from the expansion regions reported being symptomatic and STI risk factors (contact with STI-positive partner, condomless sex with >1 partner) at time of testing
- Higher proportions of clients in the expansion regions reported their first GCO test as a first-time STI/HIV test



Table 1: GCO uptake by region, Feb 2016-Jan 2019 (BOLD: significantly different from Vancouver, p<0.05)

Measure	Vancouver n (% of previous)	Island n (% of previous)	Interior n (% of previous)
Per client:			
Accounts created	6382	2992	1805
Completed testing	3320 (52%)	1922 (64%)	1124 (62%)
Per test episode:			
Specimens submitted	5799	3155	1681
Positive result	272 (5%)	138 (4%)	102 (6%)

Table 2: Socio-demographic and behavioural characteristics by region, Feb 2016-Jan 2019 (**BOLD**: significantly different from Vancouver, p<0.05)

Measure	Vancouver	Island	Interior
	n (%)	n (%)	n (%)
Per client:	N=3320	N=1922	N=1124
Age <30 years	44%	52%	59%
Men (trans-inclusive)	65%	55%	51%
White	50%	64%	62%
Never tested previously for STIs	18%	24%	33%
Never tested previously for HIV	16%	19%	25%
Per test episode:	N=5799	N=3155	N=1681
MSM	32%	25%	14%
Symptoms	15%	18%	26%
Contact to STI	8%	9%	12%
Condomless sex with >1 partner	44%	46%	49%
4+ sex partners	30%	24%	18%
Previous STI diagnosis	16%	12%	13%

Conclusions

- Our findings highlight important regional differences in program use, socio-demographics, and sexual risk behaviours among GCO clients
- Proportions of clients testing and test positivity are higher outside Vancouver, suggesting that GCO has important impacts as an STI testing program regionally
- Regional differences in testing motivations and sexual histories may affect program promotion and outreach
- Higher proportions of GCO clients from outside of Vancouver are first-time STI/HIV testers, highlighting the program's impact on reducing testing barriers
- Further research is needed in describing predictors of STI positivity, repeat testing patterns, and differences in barriers to testing across regions









