



THE IMPACT OF GETCHECKEDONLINE.COM

BC'S INTERNET-BASED TESTING PROGRAM
FOR SEXUALLY TRANSMITTED AND
BLOOD-BORNE INFECTIONS



BC Centre for Disease Control
An agency of the Provincial Health Services Authority





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CONTENTS

Key messages	2
Why did we build an internet-based testing program?	2
Why did we write this report?	3
How did we develop GetCheckedOnline?	3
Planning, developing, implementing, and evaluating	4
What did people think of the idea of internet-based testing for STBBI?	4
How does GetCheckedOnline work?	5
How many people have tested using GetCheckedOnline?	6
How many new infections have been diagnosed?	7
Offering throat and rectal swabs through GetCheckedOnline	7
Who is using GetCheckedOnline?	8
In the pilot phase	8
In the expansion phase	8
Use of GetCheckedOnline by gay, bisexual and other men who have sex with men	11
Wrapping up	13
References	14



KEY MESSAGES

1. Implementing a complicated digital health program like GetCheckedOnline within the health care system is not easy - to make it a success requires time, commitment, input from experts and potential users, strong support from leaders, and collaboration with many different stakeholders.
2. Internet-based testing is an acceptable and feasible way to improving access to testing and diagnosis of sexually transmitted and blood borne infections. One in 20 people using GetCheckedOnline test positive for an infection.
3. People who use GetCheckedOnline are highly satisfied with the service, have a higher chance of infection, and face barriers to accessing face-to-face testing services. Many have never previously tested.
4. GetCheckedOnline is an effective and scalable sexual health intervention, with different impacts in major and smaller urban and suburban communities. Users outside of Vancouver are different in terms of their demographics and behaviours, including a greater proportion of males and youth testing for HIV for the first time.
5. Integrating research and evaluation at all stages of development, implementation and expansion has been key to the success of the GetCheckedOnline program.

WHY DID WE BUILD AN INTERNET-BASED TESTING PROGRAM?

Many people in British Columbia find it difficult to get tested for sexually transmitted infections and blood-borne infections such as HIV and Hepatitis C (known as STBBI for short). There are many reasons for this, including:

- Difficulty accessing a clinic, such as being too far away, inconvenient hours, or having to wait a long time for an appointment
- Difficulty related to seeing a health care provider for testing, including fear of being judged, or feeling uncomfortable talking about one's sexual history
- Difficulties that are related to society in general, including stigma related to STBBI, or lack of social norms promoting testing

It is important to develop new ways to get tested that can help to overcome these barriers – like internet-based testing, which removes the need to go to a clinic and see a health care provider to get tested. More and more of these services are being built around the world.

Internet-based testing programs work by people going to a website, either ordering a kit to collect specimens themselves and mailing it to a lab or printing a lab form to take to a lab where specimens are collected, and getting negative results online. Positive results are usually given via phone by a doctor or nurse. In addition to removing the need to go to a clinic and see a health care provider, these programs are also thought to give people more control over their own health – and are meeting people's general expectations that health services be offered online wherever possible.

The BC Centre for Disease Control (BCCDC) decided to develop an internet-based testing program for STBBI in order to reduce the barriers to testing faced by people in BC. The program is called GetCheckedOnline (GCO). We received funding from the Provincial Health Services Authority to do this in 2009.

OUR OBJECTIVES FOR THE GETCHECKEDONLINE PROGRAM:

- To increase testing rates and diagnose infections earlier
- To reach populations that have higher rates of infection who also face barriers to getting tested
- To improve the ability of the health system to provide STBBI testing in BC

WHY DID WE WRITE THIS REPORT?

Internet-based testing services for STBBI in other places have been shown to be acceptable to the people who use them, and to lead to new infections being diagnosed. However, these programs are rarely delivered on a large scale for widespread use, and many have not been thoroughly evaluated. This means that the full impacts of these programs are not known.

We decided early on that we would evaluate and do research during all stages of developing, implementing, and expanding GCO in BC. This report describes how we developed, implemented, and expanded GCO, as well as our evaluation and research findings related to the impacts of GCO we learnt along the way.

HOW DID WE DEVELOP GETCHECKEDONLINE?

There are not a lot of instruction guides out there to follow on how to develop internet-based testing services. We used the best practices we could find for developing digital health programs, including:⁸

- Speaking with people who had developed other programs, to learn what worked and what didn't.
- Working with expert health care providers, public health and laboratory staff, information technology experts, and community organizations to determine what model could work.
- Speaking with people we hoped to reach with the program, including youth, gay men, and STI clinic clients to see what they thought about the program.
- Working with privacy and security experts to ensure the service met all required standards.
- Developing a prototype, testing how easy it was to use, and making the changes needed to develop the best possible model.

It was challenging work and it took a lot of time. We were funded to develop the program by the Provincial Health Services Authority in 2009 and launched in September 2014 – five years later.

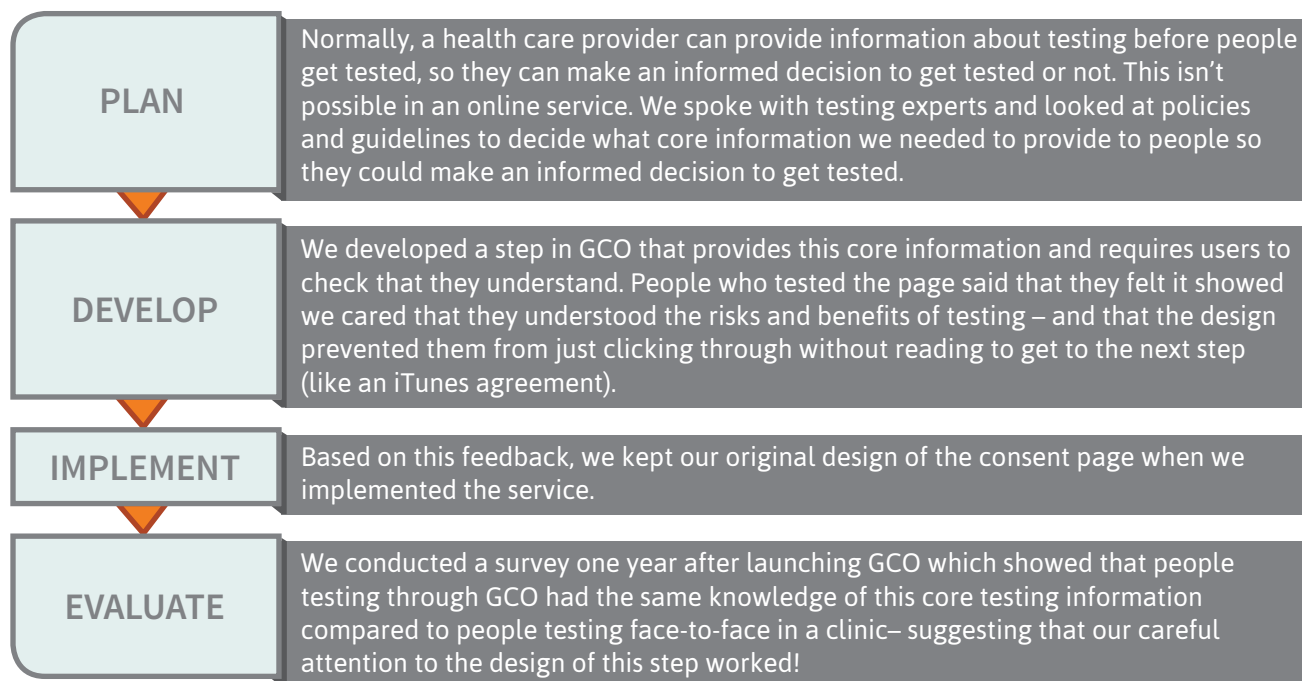
For the first 18 months, GCO operated as a pilot program in Vancouver, with promotion focused on gay, bisexual and other men who have sex with men (GBMSM) and clients visiting STI clinics. During the pilot, we worked closely with Island Health and Interior Health to make GCO available outside of Vancouver. In March 2016, GCO expanded to three communities on Vancouver Island (Victoria, Langford, Duncan) and two communities in the BC interior (Kamloops, Nelson).

The first program of its kind in Canada, GCO has received interest both nationally and internationally. In 2017, GCO was recognized as a leading practice by Accreditation Canada and awarded Runner Up in the BC Patient Safety and Quality Awards.



PLANNING, DEVELOPING, IMPLEMENTING, AND EVALUATING

Developing internet-based services requires thinking carefully at all stages of the program. Here's how we determined a way to make sure people understood the risks and benefits of getting tested (called informed consent):^{1,2}



WHAT DID PEOPLE THINK OF THE IDEA OF INTERNET-BASED TESTING FOR STBBI?

In an online sample of over 8,000 gay, bisexual and other men who had sex with men (GBMSM) across Canada in 2011, men who said they had problems getting tested were more likely to want to use an internet-based testing service.⁴ Men thought the benefits of the service were the greater privacy (27%), general convenience (20%) and being able to test at any time (12%). The biggest drawbacks were not seeing a doctor or nurse (18%), wanting to talk to someone about results (13%), not wanting online results (13%), and not trusting the service (12%).

In focus groups, youth, GBMSM and clients of a provincial STI clinic expanded on this by saying that the anonymity, convenience, and having control over testing would be benefits of online testing:^{6,7}

“This is definitely a service I would use, not only for the convenience factor but I mean, no matter how old we are, it's still an embarrassing issue for a lot of people.”

“Talking face-to-face, it's a lot more intimidating, worrying about what the other person thinks, even though you are trying to get help from them. Whereas online, they don't really know you.”

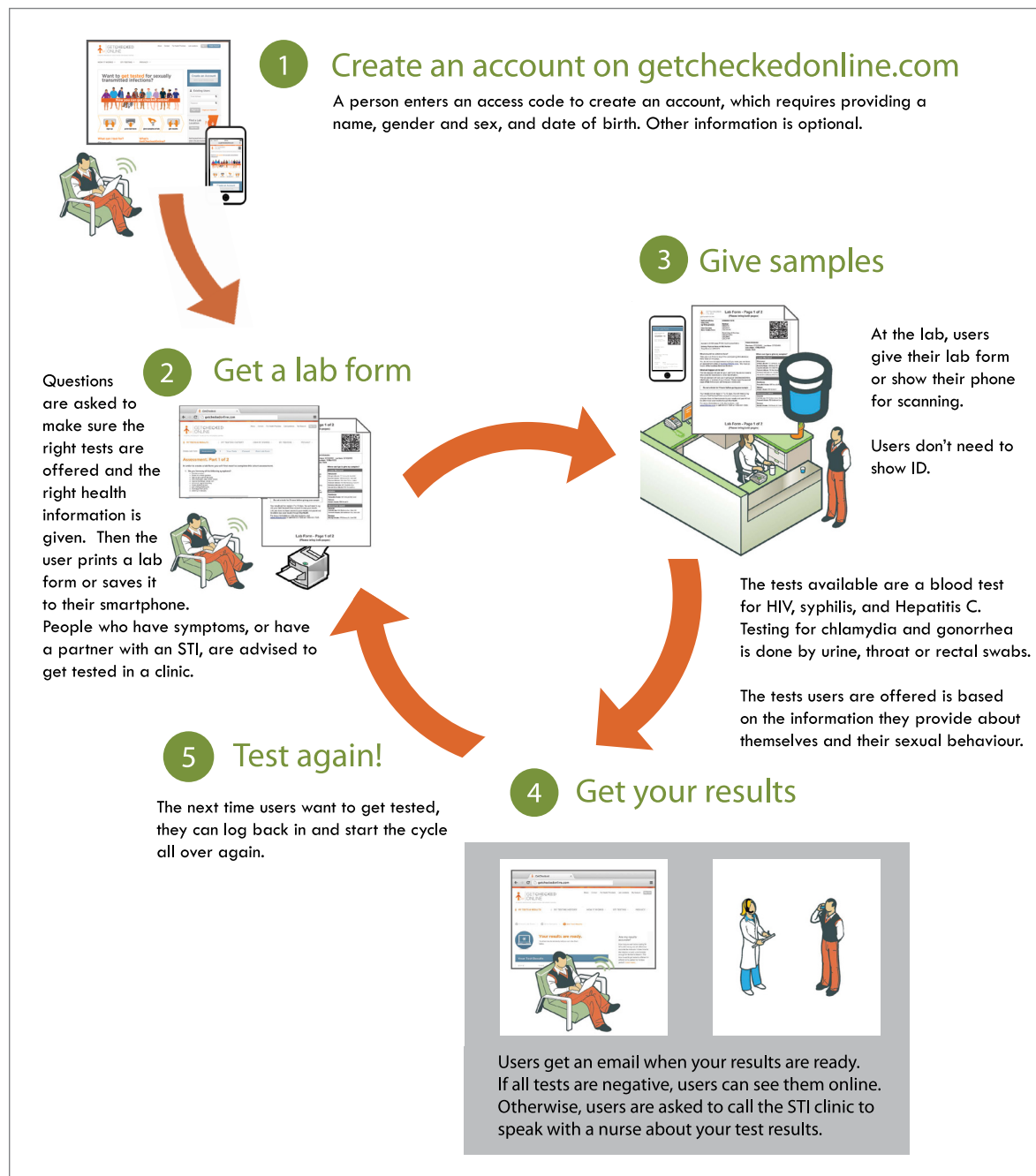
“I prefer it because... it sort of gives me agency over my own health care in a way.”

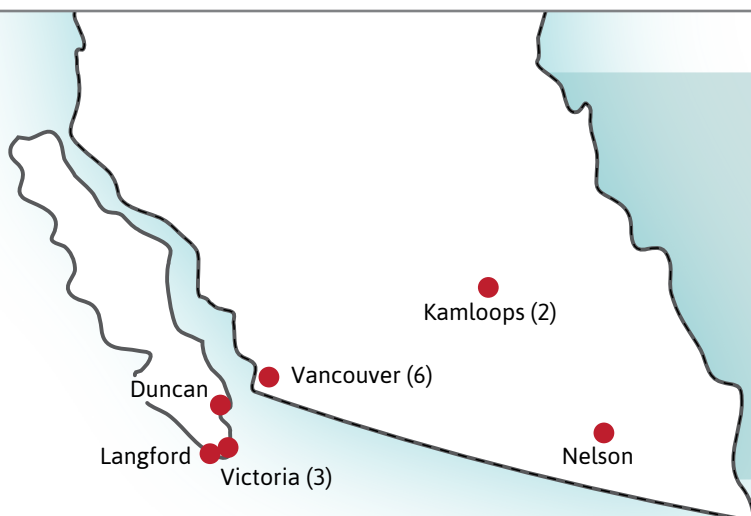
HOW DOES GETCHECKEDONLINE WORK?

GetCheckedOnline is a virtual clinic that is part of the provincial STI clinic at the BCCDC. People provide specimens at a private lab location (LifeLabs), all tests are done at the BC Public Health Laboratory, and all test results are reviewed by clinic staff. Any GCO client who tests positive receives the same follow-up, discussion about telling partners, and connection to treatment as a client who tests in the provincial STI clinic. GCO clients with a positive result that live on Vancouver Island or in the BC interior are referred to a network of walk-in and public health clinics for treatment.

GetCheckedOnline is not yet available for everyone to use, and people need an access code to create an account. These codes are included in GCO campaigns and are given to people who request a code or who try to get tested in a clinic but can't be seen quickly.

Testing through GetCheckedOnline includes five main steps:





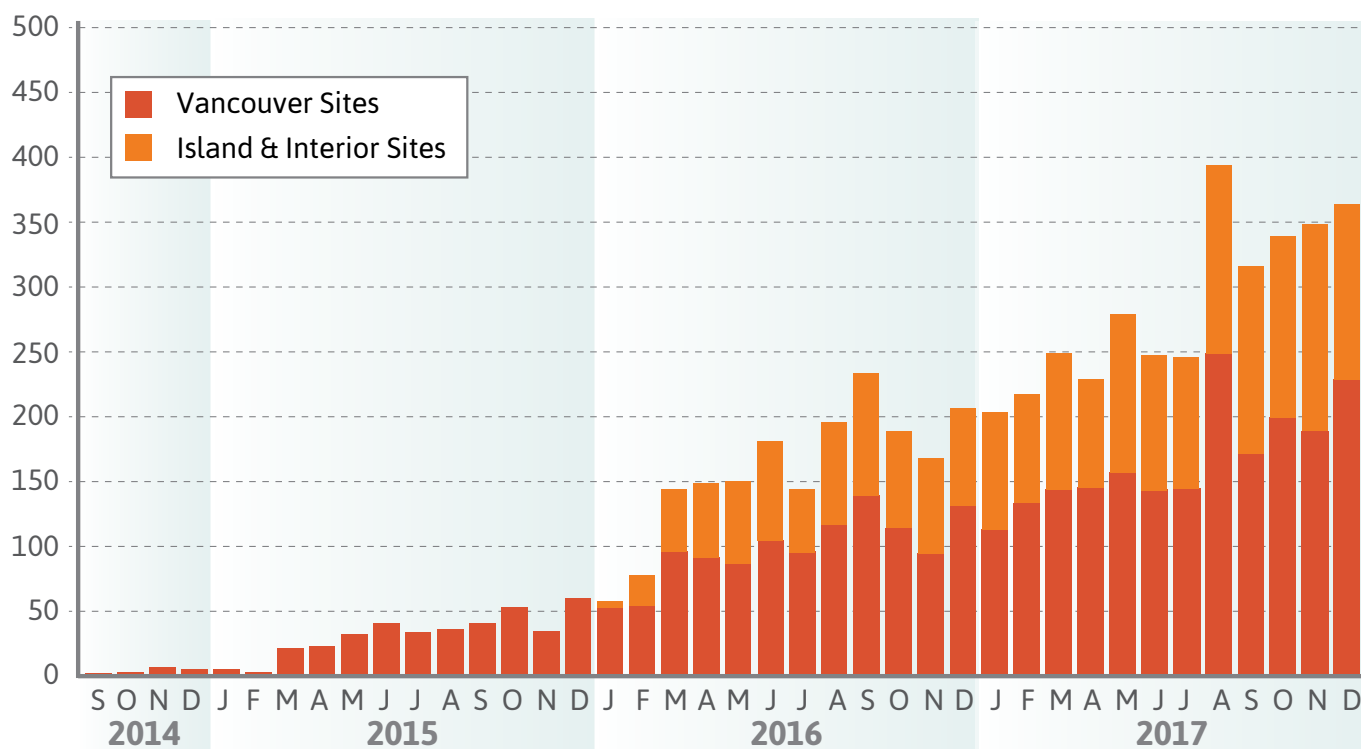
At the end of 2017, GetCheckedOnline was available at 14 LifeLabs locations in Vancouver, the BC interior, and Southern Vancouver Island. In the coming years, we hope to expand GCO to communities in the Okanagan, the Fraser Valley, and Central and Northern Vancouver Island.

HOW MANY PEOPLE HAVE TESTED USING GETCHECKEDONLINE?

As of the end of 2017, **5,751** people had tested through GCO, with 41% of people testing more than once. The number of people testing each month rose slowly during the first 18 months. Since GCO expanded in March 2016, however, the number of people getting tested has continued to increase steadily both in Vancouver and in the Island and Interior sites.

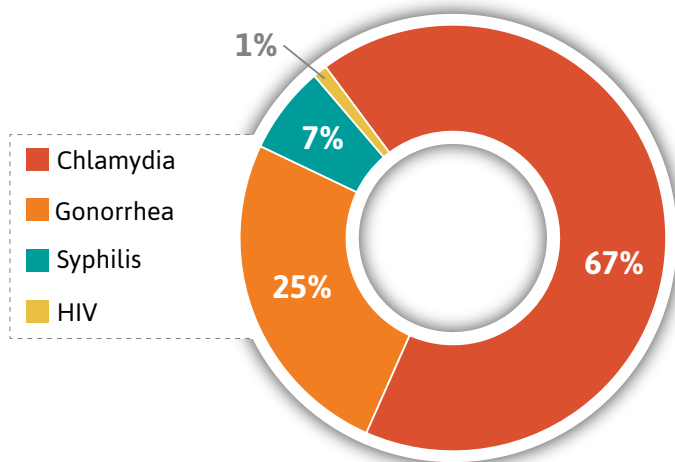
The most common way that people get access codes now is by calling a clinic or filling out a form on the GCO website to request a code. These findings suggest that people who are using GCO are very motivated to get tested and that people are hearing about GCO from others in their networks.

TEST EPISODES COMPLETED THROUGH GETCHECKEDONLINE, SEPTEMBER 2014-DECEMBER 2017



HOW MANY NEW INFECTIONS HAVE BEEN DIAGNOSED?

INFECTIONS DIAGNOSED THROUGH GETCHECKEDONLINE, SEPTEMBER 2014-DECEMBER 2017



Overall, 1 in 20 people (5%) testing through GCO test positive for an infection. This is a high percent and is similar to rates that might be found at an STI clinic. This suggests that GCO is reaching populations that have higher rates of infection – which is an objective of the program.

OFFERING THROAT AND RECTAL SWABS THROUGH GETCHECKEDONLINE

Rectal Swab

Please read all instructions before taking your sample.



1. Wash your hands with soap and water.
2. Spread a paper towel down on a flat surface. Twist the cap off the tube that has R on the green sticker.
3. Put the cap foil side down on the paper towel. Put the tube upright in a cup or glass.
4. Partially open the swab package. Don't touch the soft tip of the swab with your hands or other surfaces.
5. Get into a position that gives you the easiest access to your anus.
6. Take one hand and spread one bum cheek to the side. With your other hand, put the swab at the opening of your anus.
7. Insert the swab about 4 cm. Gently move the swab in a circle 2 or 3 times, touching the walls of the rectum.
8. Take the swab out and put it in the tube. Break the swab at the score line. If the liquid in the tube spills out, ask for a new tube.
9. Put the cap back on the tube tightly.
10. Put the tube in the plastic "Biohazard" bag that also contains the paper lab form. Close the bag.
11. Wash your hands with soap and water.
12. Within 1 week, bring the plastic bag with your swab(s) and lab form back to the LifeLabs location where you picked up the swab kit.

Worried you're not doing this correctly? Research shows that collecting your own swab is just as effective as having it done by a nurse or doctor.

Your results will be ready in 7-12 days. You will receive an email from GetCheckedOnline letting you know when your results are ready.



Throat and rectal swabs for chlamydia and gonorrhea testing were not included in the initial launch of GCO. We knew this was a large gap that presented a clinical risk – a risk that was highlighted by both health care providers and GCO clients.³

In 2015, we began working with LifeLabs to identify a process for offering self-collected throat & rectal swabs to people testing through GCO. At the same time, we tested with focus groups the idea of self-collection and what self-collection instructions should look like. We then developed a set of instructions and user-tested them with a range of individuals, including people who identify as trans and gender diverse.⁵

Swabs were successfully introduced to GCO in early 2016. Throat and rectal chlamydia and gonorrhea infections now make up **41% of all positive diagnoses** and **45% of all chlamydia and gonorrhea diagnoses** in GCO clients.

WHO IS USING GETCHECKEDONLINE?

We saw similarities and differences between people using GCO during the pilot phase in Vancouver and after GCO expanded to other communities in BC.

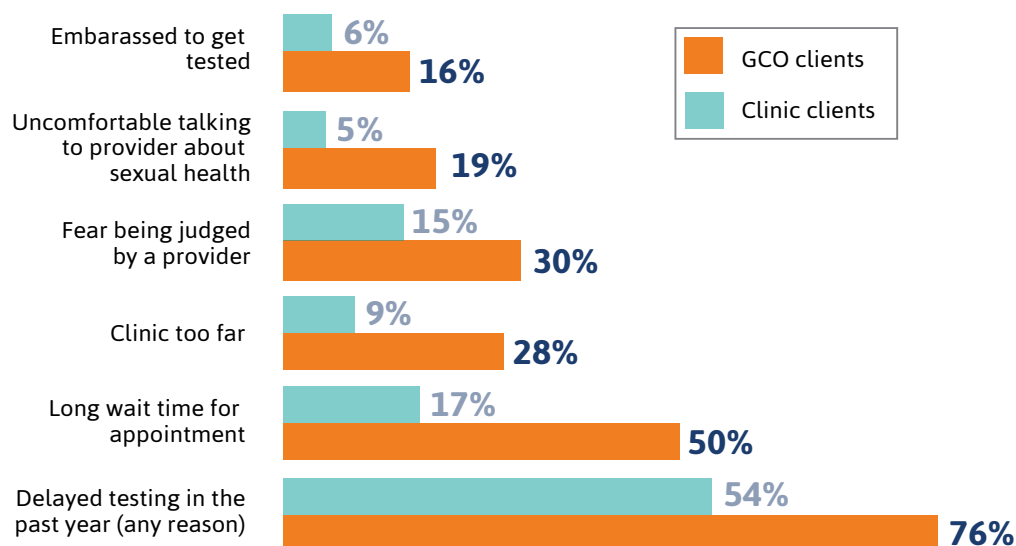
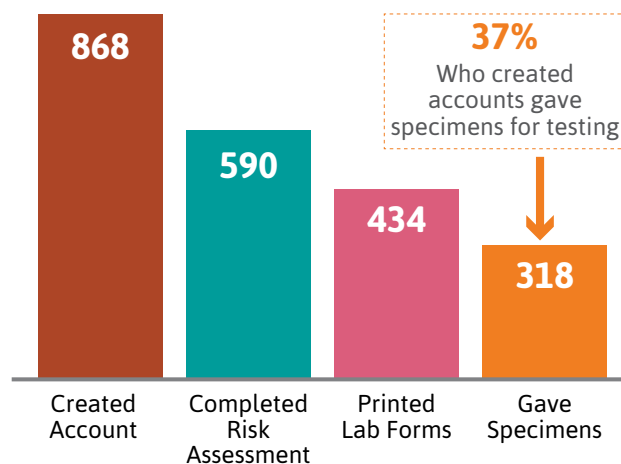
IN THE PILOT PHASE:⁹

In the first 15 months of the program, we noticed that only about 4 out of 10 people who created an account went on to test. We also did not see a lot of positive test results, only for 10 people (3%).

We think this was due to people checking out this new and innovative service, but not needing to get tested. We did see that GCO was being used by a diverse range of people, including people whose sex lives meant they had a higher chance of having an infection.

During this period, we also compared the experiences of people testing through GCO to those testing in the provincial STI clinic. We found that it was more common for people using GCO to have faced barriers to getting tested in the past.¹⁰

We think this demonstrates the success of the program, as reaching people who face barriers to testing is one of our main program objectives.



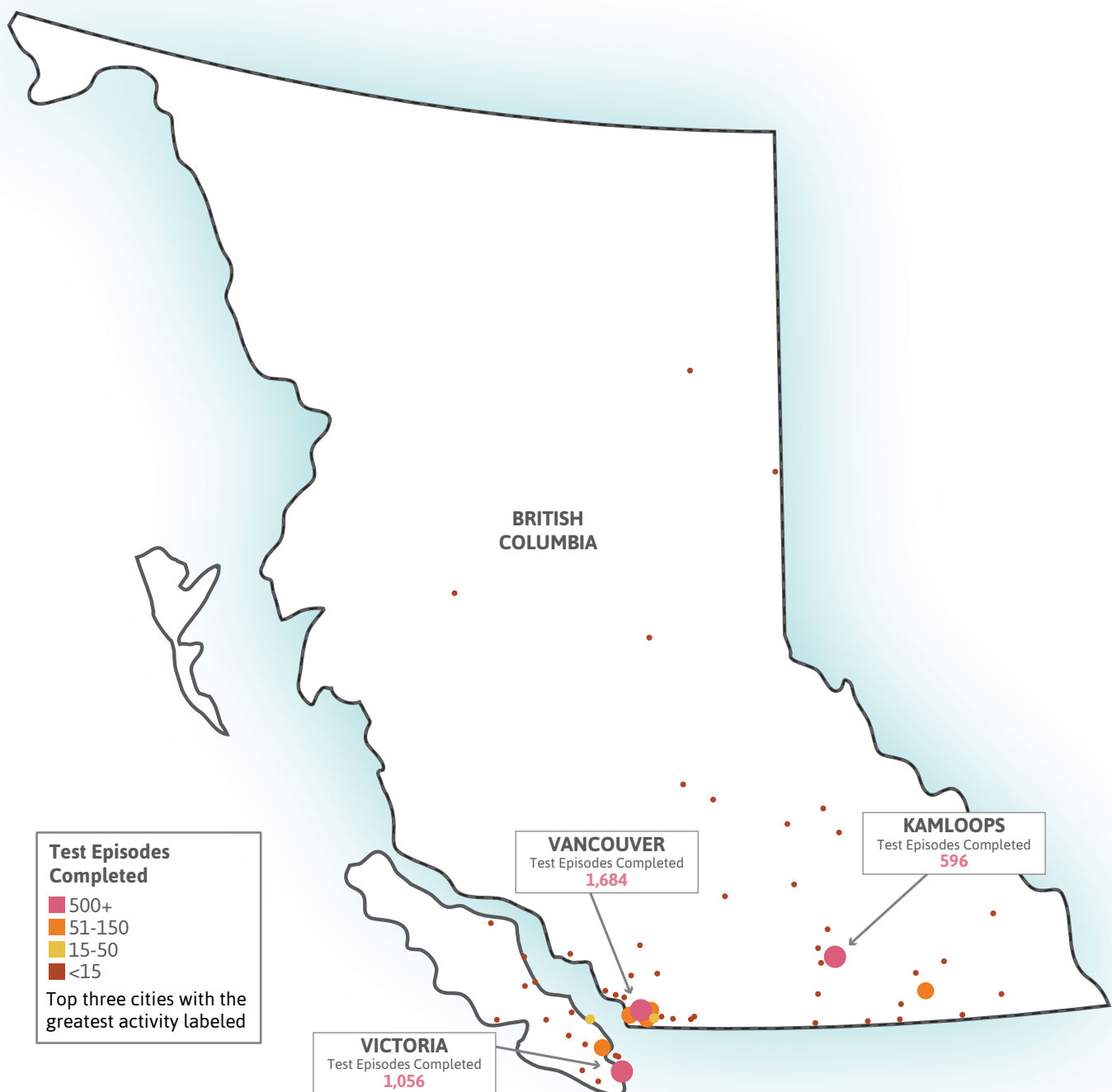
It was interesting that we didn't see many differences between GCO testers and clinic testers in terms of demographics or their use of the internet and technology. This wasn't what we expected from our early research, which led us to believe that younger, tech-savvy people would be the first users of the service.

IN THE EXPANSION PHASE:¹¹

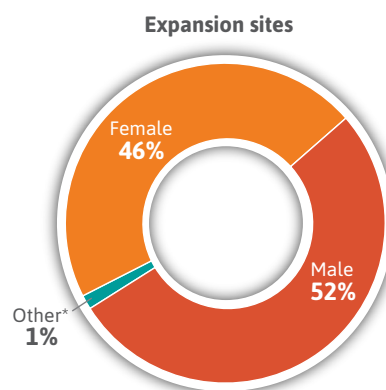
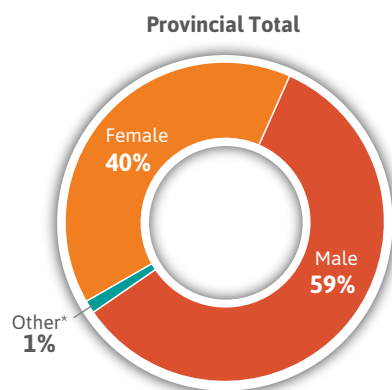
After GCO expanded to other areas of the province, the number of people using the service increased both in and outside Vancouver, and a greater proportion of people overall went on to test after creating an account, suggesting that users of GCO were motivated to get tested.

We saw that people were willing to travel long distances to visit a LifeLabs where GCO was offered. GCO clients traveled from as far as Abbotsford and Whistler to test in Vancouver, from Parksville and Nanaimo to test in Duncan, and Kelowna and Prince George to test in Kamloops.

TEST EPISODES COMPLETED THROUGH GETCHECKEDONLINE FROM MARCH 2016 – DECEMBER 2017



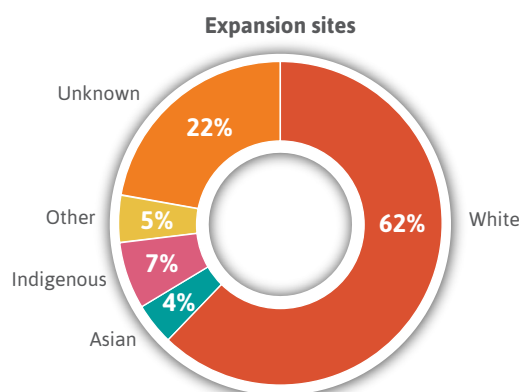
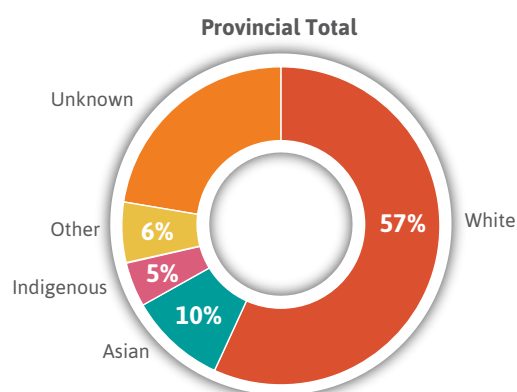
SEX OF INDIVIDUALS CREATING ACCOUNTS IN GETCHECKEDONLINE, MARCH 2016 - DECEMBER 2017



When we looked at who was using GetCheckedOnline during the two years after the expansion, we found that there were regional differences. Vancouver Island and the BC Interior sites had a greater proportion of females and a higher number of youth using the service.

***Other includes trans, genderqueer, 2 Spirit and intersex.**

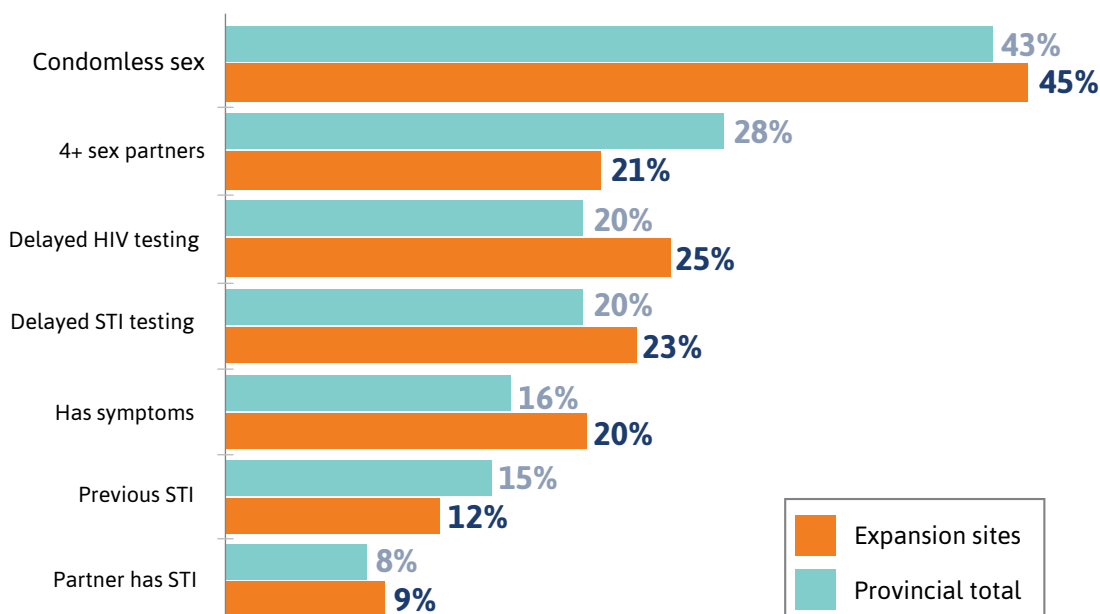
ETHNICITY OF INDIVIDUALS CREATING ACCOUNTS IN GETCHECKEDONLINE, MARCH 2016 - DECEMBER 2017



Expansion sites also had more White and fewer Asian-identified users. Vancouver Island, and in particular, the BC Interior showed greater uptake among individuals identifying as Indigenous.

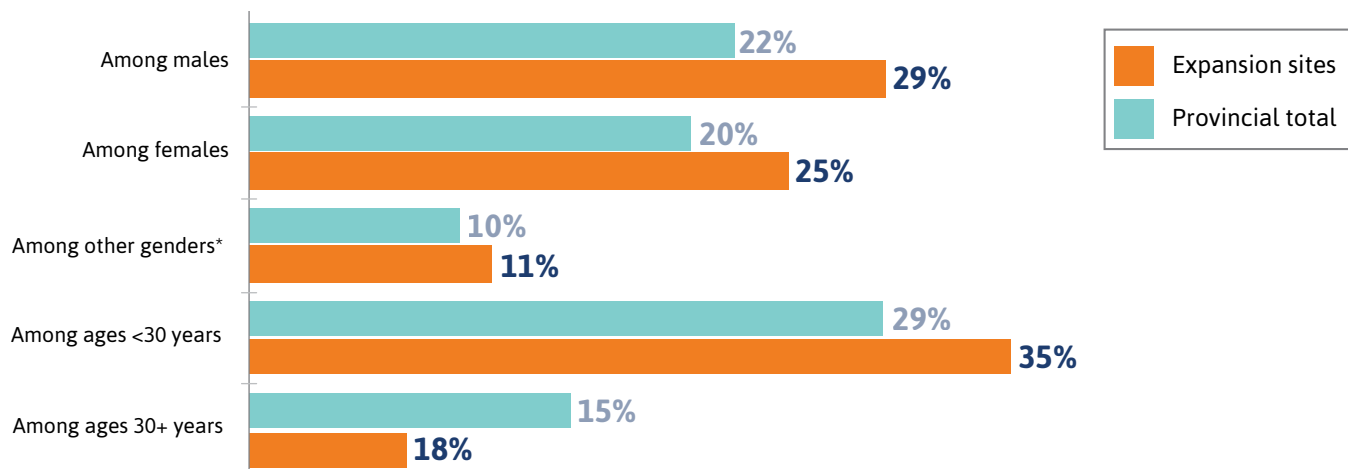
Similar to what we saw in the pilot phase, many people testing through GetCheckedOnline indicated behaviours that may have a higher chance of infection. A higher percent of users in the expansion sites said that they were experiencing symptoms or had not tested for STI/HIV in over a year, which may point to more limited access to testing in smaller urban, suburban, and rural areas.

CHARACTERISTICS OF INDIVIDUALS TESTING THROUGH GETCHECKEDONLINE, MARCH 2016 - DECEMBER 2017



Striking differences by region were also seen when looking at the past history of testing. Overall, expansion sites had a greater percent of users indicating that they had never previously tested for HIV. This was across all categories with the highest difference particularly among males and youth (<30 years of age).

CHARACTERISTICS OF GETCHECKEDONLINE USERS TESTING FOR HIV FOR THE FIRST TIME



USE OF GETCHECKEDONLINE BY GAY, BISEXUAL AND OTHER MEN WHO HAVE SEX WITH MEN

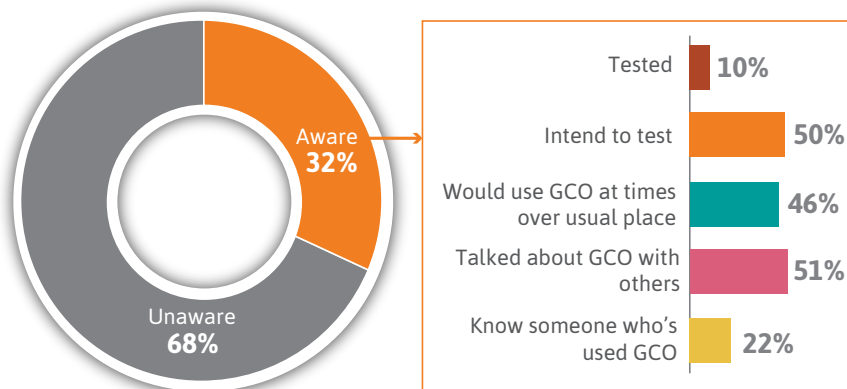
GBMSM have higher rates of STI and HIV infection compared to the general population, and as we learned in our early research, often face barriers to getting tested. In our online survey of Canadian GBMSM, 72% said they were likely or very likely to use an internet-based testing service.⁴

When we launched GetCheckedOnline in Vancouver, we focused our efforts on promoting the service to local GBMSM.

As of the end of 2017, 35% of people who tested through GCO identified as GBMSM. In order to find out what percent of local men knew about the service and had tested through it, we did a survey online, at a clinic, and at Pride events in the Vancouver area in 2016.¹²

Of the 1200+ GBMSM that took the survey, one-third were aware of GCO. Here's what we learned about their experiences with GCO:

Overall, intention to use GCO remained high in this survey, and the results suggest that information about GCO is circulating in social networks between GBMSM. One in 10 men aware of the service had used GCO. The findings also suggest that continuing to promote GCO and increase awareness of the service is important.



WHAT DO PEOPLE THINK ABOUT GETCHECKEDONLINE?

Over 350 GCO clients have provided feedback about the GetCheckedOnline service through an online survey.¹³ Overall, users are very satisfied with the service:

- 98% of would use GCO again
- 98% would recommend GCO to others
- 98% agreed or strongly agreed it was easier to test with GCO
- 95% agreed or strongly agreed it was convenient to test with GCO
- 96% were satisfied or very satisfied with their last GCO experience

We also interviewed youth and GBMSM who had used GetCheckedOnline.¹⁴ Both groups like the service for:

- convenience,
- not having to wait to get tested at a clinic,
- increased privacy and anonymity, and
- avoiding negative attitudes about their sex lives from healthcare providers.

Young people thought of online testing as modern and “the future”. For some GBMSM, GetCheckedOnline gave them more control over testing and lowered anxiety by getting results faster. Men outside of Vancouver also liked that GCO let them get tested without having to tell anyone about their sexual orientation.

People also saw that there were times when getting tested in person would be better – for example, for people with symptoms, anxiety about STIs, or who haven’t tested very often.

“I would say online testing is way easier and way more convenient and, like, definitely my preferred method. I would not want to go back in for an in-person test now that I’ve been through the online system.”

Female, 26 years, straight

“It’s an online form that has no professional interaction right? And so even though it may suit your needs, you might have some other experiences or situations that could benefit from seeing somebody who’s trained in the field, right? Like, this service doesn’t identify if I have HIV anxiety, right?”

Male, 28 years, bisexual

WRAPPING UP:

GetCheckedOnline has proven itself a successful digital health program, demonstrating feasibility in providing testing and high acceptability to users. We continue to see increasing numbers of people testing through the program, meaning GCO is increasing access to testing and the capacity of the health care system to provide STBBI testing. Our research also demonstrates that GCO reaches people and populations who need it the most - that have barriers to accessing face-to-face testing and who have a greater chance of getting an infection. We can conclude from this evidence that GCO is effective in achieving its objectives.

While it may be some time before GetCheckedOnline is available across BC, BCCDC is committed to continuing to expand the service to other communities in partnership with Health Authorities, including rural and remote communities. As many communities do not have access to LifeLabs, expanding GCO will require collaboration with other laboratories, both private and public. These discussions have started and show promise for offering GCO in more locations.

Overall, our experience demonstrates that implementing a complicated program like GetCheckedOnline within the health system is not easy, and requires time, a strong commitment, input from experts and users, strong leadership support and collaboration with many different stakeholders. As the findings in this report show, the results have been worth the effort. By documenting and sharing our experience and findings, we hope this report will be useful for people in other places thinking about developing internet-based testing programs, or digital health services in general.

... AND MORE RESEARCH!

We're continuing to do research on GetCheckedOnline, as there are still many unanswered questions about the impact of the program. Projects currently underway include looking to see whether GCO leads to more frequent testing, and mathematical and economic modeling of GCO's cost-effectiveness and impact on overall population rates of infection.

We've recently been awarded a 5-year, \$2 million grant by the Canadian Institutes of Health Research that will allow us to better understand the different impacts seen in communities where GCO has been and will be implemented. We'll also examine how GCO can be better adapted for other populations in BC that are facing testing barriers (e.g., translating to different languages and promoting in minority language populations). We'll also be partnering with colleagues in Toronto to explore how feasible it would be to implement GCO there.

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www.lovebytesresearch.com

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