Get checked… where? Lessons learned from implementing GetCheckedOnline, an integrated complex public health system intervention to promote online STI/HIV testing in British Columbia, Canada

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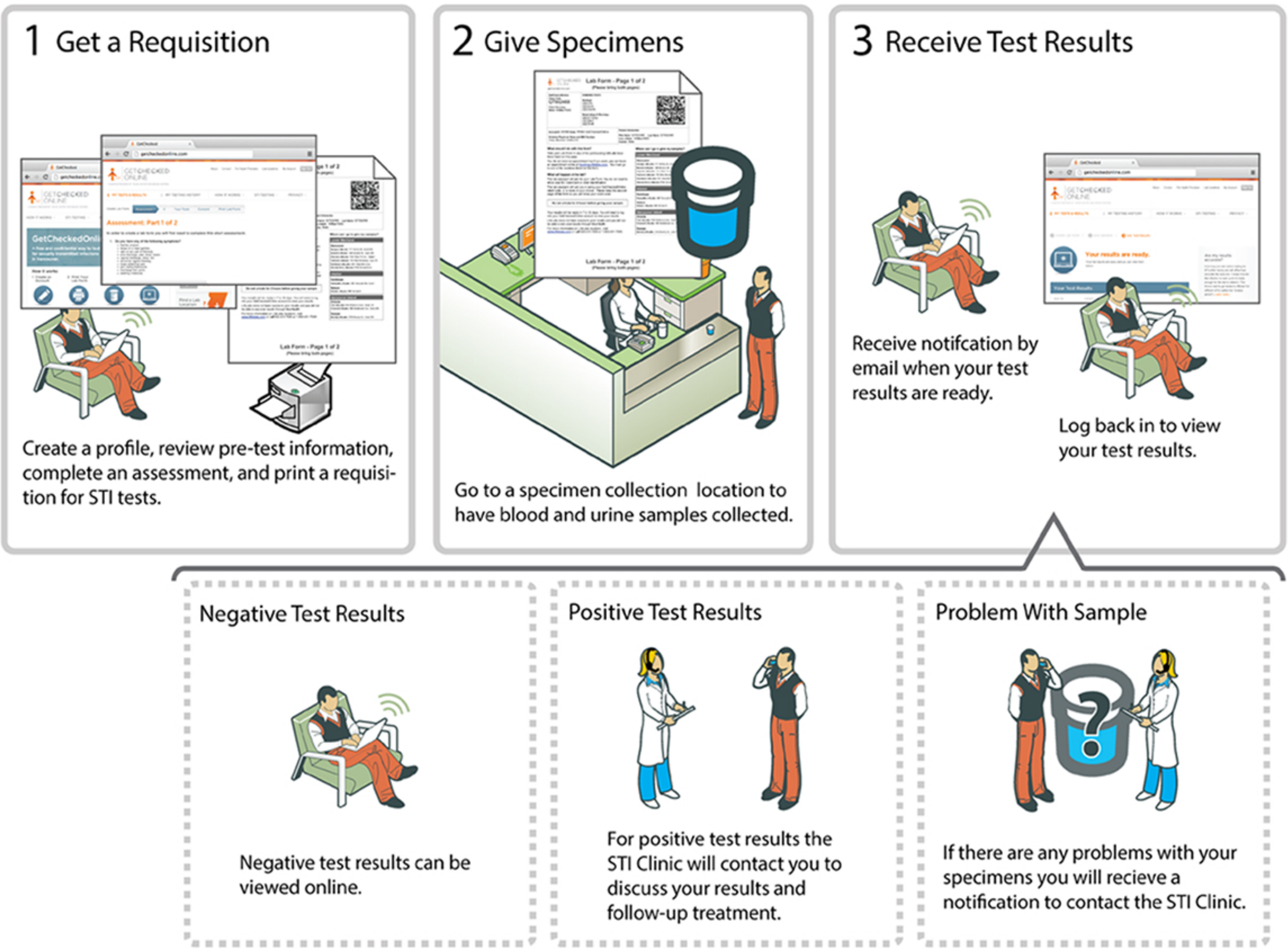
www.getcheckedonline.com, BC's internet-based testing service

The British Columbia Centre for Disease Control (BCCDC) was funded in 2009 to develop an internet-based testing service for chlamydia, gonorrhea, syphilis, HIV and hepatitis C.
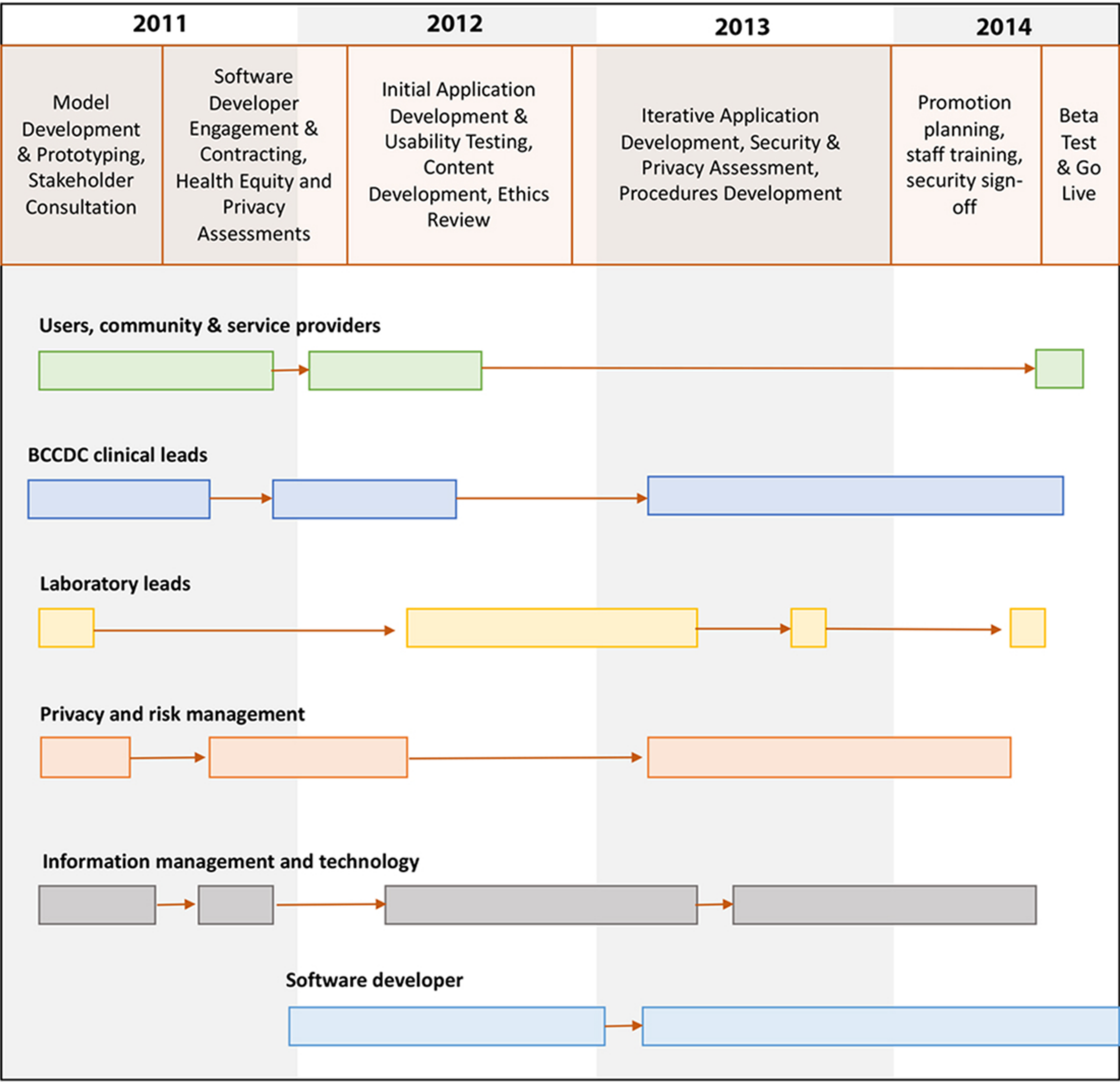
The program is a virtual extension of the provincial sexually transmitted infection (STI) clinic, where follow-up and treatment of positive STI diagnoses are managed. The goal of the program is to reduce testing barriers, diagnose infections earlier, and expand testing capacity in the province.

The program, GetCheckedOnline (GCO) launched in September 2014. Here we describe our key lessons learned from the development and implementation of GCO.

How GetCheckedOnline works

1 Get a Requisition
Create a profile, review pre-test information, complete an assessment, and print a requisition for STI tests.

2 Give Specimens
Go to a specimen collection location to have blood and urine samples collected.

3 Receive Test Results
Receive notification by email when your test results are ready.
Log back in to view your test results.

Negative Test Results
Negative test results can be viewed online.

Positive Test Results
For positive test results the STI Clinic will contact you to discuss your results and follow-up treatment.

Problem With Sample
If there are any problems with your specimens you will recieve a notification to contact the STI Clinic.

How did we develop GetCheckedOnline?

Planning 2009-2011
- Established a multidisciplinary team
- Identified, engaged, and consulted with key stakeholders
- Reviewed the literature and consulted with program experts
- Consulted potential users and sexual health care providers
- Determined regulatory and practice requirements

Development, usability testing, and revision 2011-2014
- Established Clinical and Technical working groups
- Assessed potential impact on health equity
- Met provincial requirements for pretest counseling and informed consent
- Determined risk assessment questions and test recommendations
- Usability tested and revised
- Completed privacy impact and security assessments
- Developed clinical procedures, trained clinic staff, and prepared for implementation
- Established funding model

Key players involved in the development, testing and revision of GetCheckedOnline

2011		2012	2013	2014	
Model Development & Prototyping, Stakeholder Consultation	Software Developer Engagement & Contracting, Health Equity and Privacy Assessments	Initial Application Development & Usability Testing, Content Development, Ethics Review	Iterative Application Development, Security & Privacy Assessment, Procedures Development	Promotion planning, staff training, security sign-off	Beta Test & Go Live

Users, community & service providers

BCCDC clinical leads

Laboratory leads

Privacy and risk management

Information management and technology

Software developer

What did we learn?

What worked well
- Identifying and engaging key stakeholders early and throughout the project established strong support for the program
- Consulting with experts who previously developed internet-based testing programs helped to identify and overcome potential obstacles, and inform the final testing model
- Identifying potential privacy and clinical risks early on helped determine ways to mitigate these risks
- Establishing effective partnerships with researchers led to an integrated knowledge translation approach where formative research findings were rapidly shared with staff developing the application

Challenges we faced
- Delays in development due to dependence on key external partners with competing priorities and varying capacity
- Needed to develop new agency practice standards and policies before implementation (e.g., nursing procedures for emailing clients about results)
- As the first e-Health application in our health authority that allows patients to see own data, needed to develop new information technology infrastructure
- Despite users wanting electronic ordering, printing paper requisitions still required due to outdated system requirements at participating lab collection sites

Our experience rolling out GetCheckedOnline:

- highlights the challenges and opportunities of developing and implementing novel, complex online sexual health interventions
- underscores the importance of understanding the role of implementation contexts including organizational environment and funding models in their development, uptake, and scale-up

There is little practical guidance on how to develop e-Health interventions. We hope these lessons learned may be helpful to others implementing complex public health system interventions, in both online and clinic settings.

For more information:
A full description of the development of GetCheckedOnline and lessons learned will shortly be published in the Journal of Medical Internet Research. When published, this article and other findings from our research can be found at www.lovebytesresearch.ca

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