Health equity and British Columbia's *GetCheckedOnline* program: How can we make an online testing service for sexually transmitted infections that works for everyone?

Janine Farrell,[1] Travis Salway Hottes,[1,2] Devon Haag,[1] Mark Bondyra,[1] Mark Gilbert,[1,3,4]

1. BC Centre for Disease Control
2. Dalla Lana School of Public Health, University of Toronto
3. University of British Columbia
4. Ontario HIV Treatment Network

BACKGROUND:

- Internet-based testing platforms for sexually transmitted infections (STIs) such as GetCheckedOnline (GCO) are considered to increase testing access for everyone, including traditionally underserved populations, yet this assumption is rarely examined in depth.
- In developing GCO we wanted to create a platform that is accessible, sensitive, and beneficial to underserved populations affected by STIs/HIV.
- We conducted a health equity impact assessment (HEIA) to examine these questions and inform the development and evaluation of GCO.

THEORETICAL RATIONALE:

Theory of Fundamental Causes[1,2]

- Flexible resources (e.g. time, social capital, education) allow people to avoid/mitigate effects of disease through access to (new) health technologies.
- Flexible resources provide access to beneficial health outcomes regardless of time, geographical area, etc.
- The introduction of a new health technology can create gradients in population health distribution that did not exist before.
- As technology develops, new interventions replace old ones and reinforce the same inequities.

> "The relationship between social position and health is reinforced and reproduced over time because the mechanisms that produce social inequities are replaced by new technologies that serve the same reinforcing function." [2]

METHODS:

- The HEIA began with screening, scoping and impact assessment stages prior to the GCO program planning and development.
- Literature review and expert consultations were used to gather a range of local and global evidence.
- An intersectional, equity-based lens was used to evaluate evidence and determine potential impacts of GCO on populations historically underserved or marginalized in this province.
- The HEIA assessed the likely harms and benefits of GCO and its potential to exacerbate social inequities in British Columbia.
- Six months after the launch of GCO, the assessment was updated in preparation for health equity oriented program monitoring and evaluation (2015).

Key population groups considered (2011)

- Bisexual, gay and other men who have sex with men
- Youth
- Diverse socio-cultural groups & newcomers to Canada
- Intersex, transgendent and gender variant populations
- Aboriginal (First Nations, Metis, Inuit) people
- People in rural and remote regions of BC

RESULTS:

- Specific pathways through which GCO was likely to reinforce or circumvent health inequities related to sexual health were identified for six key populations in 2011 (see box above).
- Two additional population groups were identified in 2015 as being especially important, including individuals doing sex work and those with physical and neuro-cognitive disabilities.
- Over a decade of research on internet-based cancer-oriented health services found level of educational attainment and internet and health literacy are the key mitigating factors that determine if individuals can benefit from online health services of various kinds
- A central concern was the potential for the service to reach an already well-served downtown population of gay, bisexual and men having sex with men; those in most need may have access to the Internet but may not possess crucial health and online literacy skills necessary to take advantage of GCO.
- Final recommendations identified strategies to mitigate unintended negative impacts and enhance positive impacts.

RECOMMENDATIONS:

- Lab: Add Hepatitis C test option and pharyngeal, anal and vaginal swabs.
- Research: Use non-traditional population categories; routinely collect educational status and postal code of users; set goals and measure health equity outcomes; contribute health equity analysis to e-health literature.
- Organization: Foster health equity practice and education within existing online services team members.
- Usability: Optimize website for screen readers, mobile phones and other aids; maximize visual aids and minimize text; aim for a grade 6 reading level; avoid normative or shaming language or visuals; use images that reflect a range of gender, ethnicities, couples, families, ages, etc.
- Access: Following pilot, aim to expand service to remote and underserved areas of the province; develop targeted campaigns to capture identified groups who could benefit most.

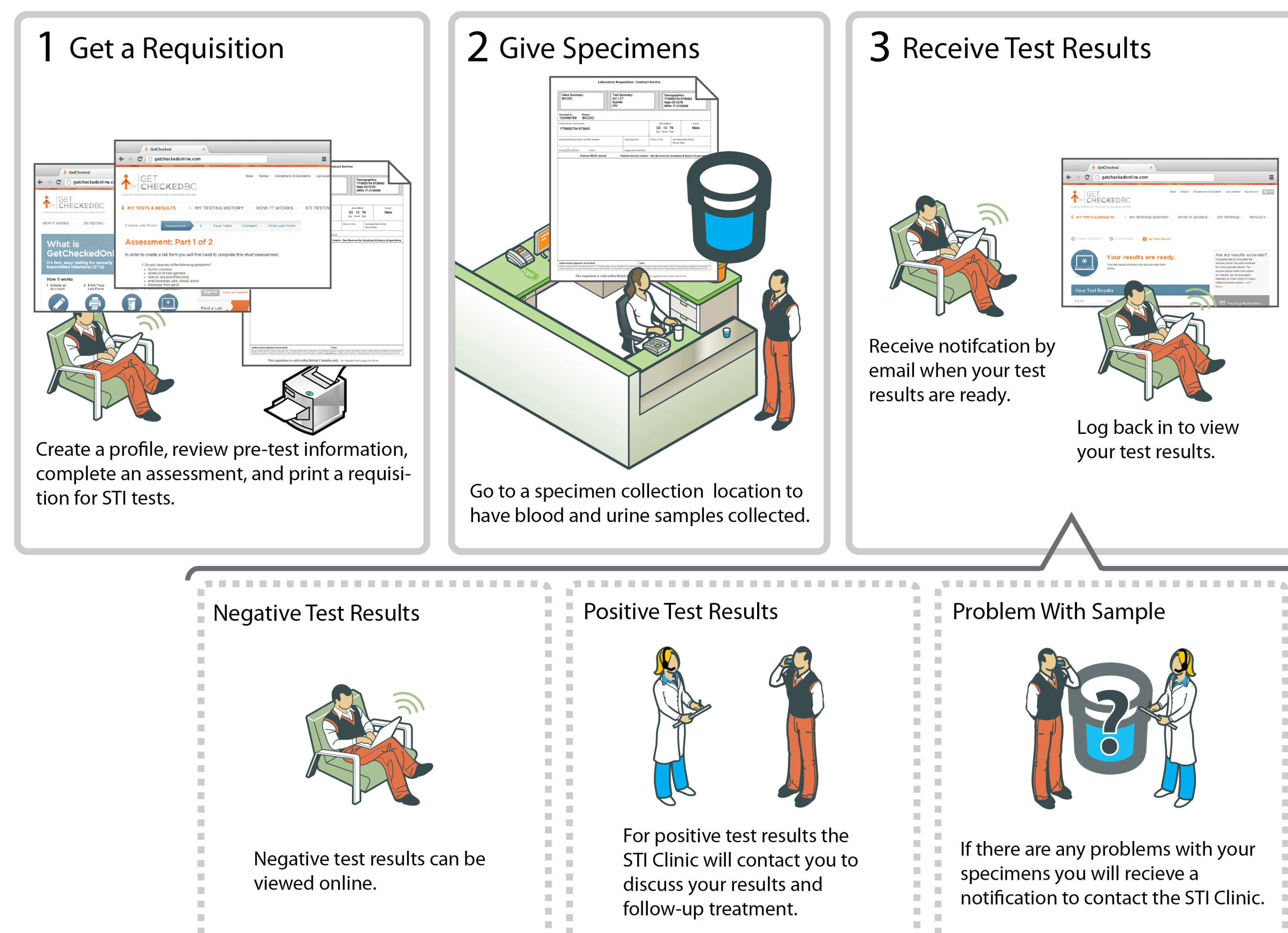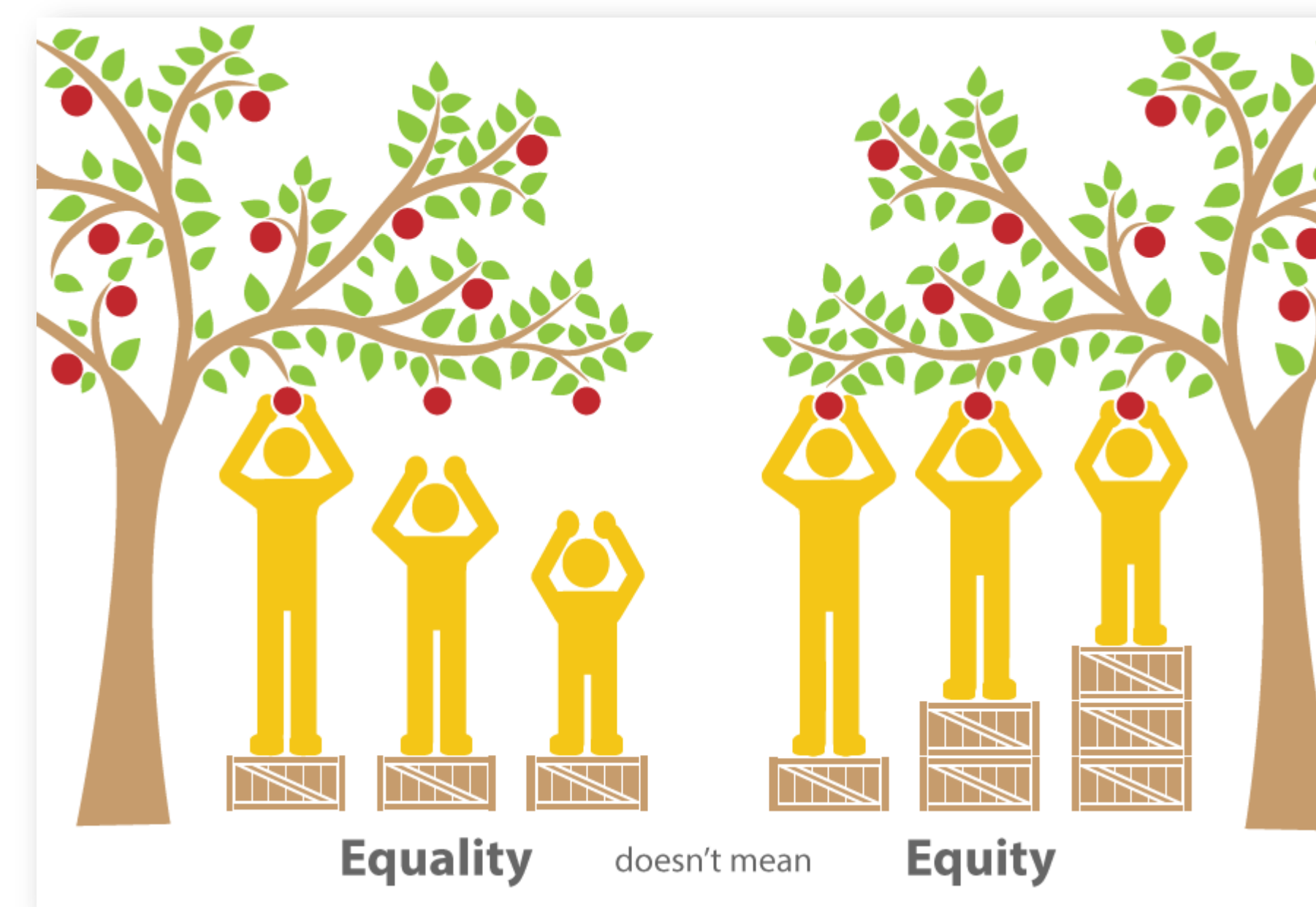## Figure 1: How clients use GetCheckedOnline (GCO)

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.

Figure 2: Health equity model[3]

Equality doesn't mean Equity

CHANGE MAKING:

The HEIA process directed the attention of decision-makers to important ways GCO could unintentionally exacerbate health inequities, and created opportunities to build organizational capacity for identifying and addressing social inequities in research and public health practice.

In response to the recommendations made in 2011, several of the initial recommendations were addressed by the GCO development team:

1. Currently introducing the first oral and rectal swab testing for chlamydia and gonorrhea in Canada.
2. Contributed significantly to online and e-health research focusing on sexual health.
3. Added Hepatitis C testing.
4. Included complex, non-categorical measures of gender, sexuality, ethnicity, sexual behaviour, education, to procedural and research-oriented materials where possible.
5. Prioritized program sensitivity and accessible language in all related communications and materials (e.g. instructions, website visuals and language, research recruitment, research participation).
6. User-tested program with individuals from a range of gender and sexual identities.
7. Avoid normative language, images, discourses/themes, inaccessible language and unnecessary background information on website and related materials.
8. In 2015 the service is available to the public and has been widely accepted by users to date; ongoing data collection will give the team a clear idea of their progress on equity-based goals.

ACKNOWLEDGEMENTS:

Many thanks to those who make my work at the BCCDC so valuable. Thanks Mark Gilbert, Travis Salway Hottes, and Lorraine Halinka Malcoe for their valuable support and insight; The OSHSP Team; Jeannie Shoveller and the UBC Youth Sexual Health Team; my expert interviewees; and Craig Janes and Marion Doull for their HEIA guidance.

REFERENCES:

1. Link, B. G., & Phelan, J. (1995). Social conditions as fundamental causes of disease. *Journal of health and social behavior*, 80-94.
2. Phelan, J. C., Link, B. G., & Tehranifar, P. (2010). Social conditions as fundamental causes of health inequalities theory, evidence, and policy implications. *Journal of health and social behavior*, 51, S28-S40.
3. Saskatoon Health Region (2014). www.communityview.ca/infographic_SHR_health_equity_2014.html

FOR MORE INFORMATION:
To talk during/after the conference please email janine.e.farrell@gmail.com. To find out more about our research projects including this one please visit our website www.lovebytesresearch.ca