Differences in reported testing barriers between clients of an online STBBI testing service and a provincial STI clinic in Vancouver, Canada

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Conflict of interest

I have no conflicts of interest to declare.
Online testing programs for STBBI

• Feasibility, proof of concept demonstrated

• Generally considered to overcome barriers to accessing testing services

• Key knowledge gaps:
  – Contribution as part of a spectrum of testing services?
  – Is use patterned on existing social gradients?
Want to get tested for sexually transmitted infections?

Now you can get checked online!

What can I test for?
Chlamydia
Gonorrhea
HIV
Syphilis
Hepatitis C

What's GetCheckedOnline?
GetCheckedOnline is a new and easy way to test for sexually transmitted infections (STI) in British Columbia, Canada. In a few steps, you can print a lab form, then go to a participating LifeLabs site to give your samples and get your results online or over the phone.

What's New?
Objective

• To determine whether GCO clients differed from STI clinic clients
  – Shed insights on why people would choose to test online vs. in a clinic setting

• Hypotheses:*
  – GCO clients would more frequently report STBBI testing barriers
  – GCO clients more likely to have access to technology and higher digital literacy

Methods:

• Observational comparative design, not experimental
• Comparison group was STI clinic clients in settings where GCO was promoted in Vancouver, BC
  – Provincial STI clinic (BC Centre for Disease Control)
  – Two community STI clinics accessed by GBMSM
• Online survey
Methods: Recruitment (GCO, Provincial clinic)

- June 2015 to April 2016
Methods: Recruitment (cont)

• Also at two community STI clinics for GBMSM via recruitment poster, cards

• Eligibility criteria:
  – Recently tested for an STI or HIV
  – At least 15 years of age

• $20 gift card
Methods: Online survey

- Developed multi-level framework for testing barriers and facilitators:
- Piloted and revised
- 105 questions total, English language
Methods: Statistical analysis

• Determined potential recruitment biases
  – Consented to be contacted for research, vs. not
  – Participated, vs. not
  – Chi-square or t-test, \( p<0.05 \)

• Bivariate analyses of survey data
  – Chi-square or t-test, \( p<0.01 \)
Results: Recruitment

**GetCheckedOnline**
- Tested during study period: 518 clients
- Consented to be contacted for research & sent email invitation: 122 (23.6%)

**Provincial STI clinic**
- 3955 clients
- 811 (20.5%)

**Median age**
- GetCheckedOnline: 35 (vs 32 yrs)
- Provincial STI clinic: 30 (vs 32 yrs)

**Race**
- GBMSM: 45% vs 26%
- Non-Caucasian: 25% vs 35%

**Sex**
- Male: 58% vs 69%

**Orientation**
- Homosexual/bisexual: 23% vs 18%

Differences between consented to be contacted for research vs not within each group, $p<0.05$
No significant differences

Male (50% vs 63%)

Differences between participated vs not within each group, $p<0.05$
Results: Recruitment (cont).

- Tested during study period
- Consented to be contacted for research & sent email invitation
- Visited study recruitment website
- Started survey
- Completed survey

Community STI clinics:

- 5015 clients
- 38 (0.8%)
- 28 (73.7%)
- 28 (100%)
Results: Sample overlap

Of 86 GCO clients:  
45% had tested at a recruitment clinic

Of 349 clinic clients:  
43% aware of GCO  
(7% had used site)
## Results: Comparison of GCO and Clinic clients

<table>
<thead>
<tr>
<th>Client Characteristic*</th>
<th>GCO n=86</th>
<th>Clinic n=349</th>
</tr>
</thead>
<tbody>
<tr>
<td>Important to access online health resources</td>
<td>76%</td>
<td>57%</td>
</tr>
<tr>
<td>Reason for last test — Routine test</td>
<td>59%</td>
<td>42%</td>
</tr>
<tr>
<td>Reason for last test — symptoms, or contact to STI</td>
<td>9%</td>
<td>30%</td>
</tr>
<tr>
<td>Uncomfortable discussing sexual history with HCP (any)</td>
<td>16%</td>
<td>5%</td>
</tr>
<tr>
<td>Fear of being judged by HCP when providing sexual history</td>
<td>29%</td>
<td>15%</td>
</tr>
<tr>
<td>Usually go to family physician for care when sick</td>
<td>55%</td>
<td>40%</td>
</tr>
<tr>
<td>Delayed testing in past year due to clinic distance</td>
<td>24%</td>
<td>9%</td>
</tr>
<tr>
<td>Last time tested in a clinic, agreed that:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Found clinic hours to be convenient</td>
<td>59%</td>
<td>77%</td>
</tr>
<tr>
<td>Had to wait a long time to see a doctor or nurse</td>
<td>48%</td>
<td>20%</td>
</tr>
<tr>
<td>Median age</td>
<td>35 yrs</td>
<td>30 yrs</td>
</tr>
<tr>
<td>Gay, bisexual or other man who has sex with men</td>
<td>41%</td>
<td>23%</td>
</tr>
<tr>
<td>Embarrassing to test for an STI or HIV</td>
<td>19%</td>
<td>6%</td>
</tr>
</tbody>
</table>

*displaying significant results only at $p < 0.01$.  

Discussion

• Consistent with our formative research, GCO clients more likely to report
  – Delays in testing
  – Barriers to accessing clinic-based services
  – Barriers related to interacting with a health care provider
  – Stigma related to STI/HIV testing

• Did not see differences in technology access/literacy, challenging our assumptions about digital natives & digital divides

• Saw few differences by socio-demographics
Limitations

• Online survey

• Generalizable to urban areas, with accessible, low-threshold clinic services

• Natural experiment
  – Overlap between groups suggests valid comparison

• Further research in different settings, regions and populations needed
In conclusion

• Online STBBI testing services overcome access and provider-related barriers to testing, and may not exacerbate existing inequities in testing access

• Clinic barriers could be addressed by expanding clinic access

• However, other barriers reflect underlying system issues and are difficult to address
  – Stigma, appropriateness and safety of clinical services
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Mark Bondyra, BCCDC
Cathy Chabot, Youth Sexual Health Team
Thanks

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