

# “Mini Dial-a-Nurses” and “Good Brands”: What Are the Desirable Characteristics of Online HIV/STI Risk Calculators?

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## BACKGROUND

- A wide variety of personalized risk self-assessment tools for HIV/STIs exist online.
- Commonly known as “risk calculators,” these online tools often provide tailored HIV/STI information to users based on their answers to a set of questions.
- Risk calculators have the potential to be useful HIV/STI prevention and educational tools.
- But there is still much to learn about how users interact with risk calculators and what features make them effective.

## OBJECTIVE

- To explore the desirable content and format characteristics of HIV/STI risk calculators that would make them effective in prevention and testing from the perspective of potential users and service providers.

## METHODS: Recruitment

- We recruited potential risk calculator users via an email invitation sent out through the BC Centre for Disease Control’s STI clinic email list.
- STI clinic clients were pre-screen and allocated to separate focus groups according to age and sexual orientation.
- Inclusion criteria included having ever tested for STIs, aged 15 and above, and being able to communicate in English.
- HIV/STI service providers were recruited via email invite through professional networks.

## METHODS: Procedures and Analysis

- We conducted 5 five focus groups in Vancouver, Canada, between June and August 2017.
- Potential users and service providers interacted with 5 online HIV/STI risk calculators selected for varied target audiences, completion lengths, and recommendation messages, and also with a BC-specific risk calculator currently in development.
- Using a structured interview guide, group discussions focused on expectations, use contexts, perceived benefits and drawbacks, and tools’ features.
- Session transcripts were examined to determine patterns and themes using an interpretive description approach.

## RESULTS: Participant Characteristics

POTENTIAL USERS:

- 12 potential users: 4 youth, 3 gay men, 5 other STI clinic clients
- Varied geographic backgrounds: 8 born in Canada; 9 outside of Canada
- Highly educated: 9 had college, university, trade education; 8 had graduate education

SERVICE PROVIDERS:

- 5 service providers: 3 nurses, 1 CPS outreach nurse, and 1 sexual health manager
- Highly experienced: between 1 and 30 years of direct work with clients seeking STI prevention services

## RESULTS: Six Desirable Features of Online Risk Calculators

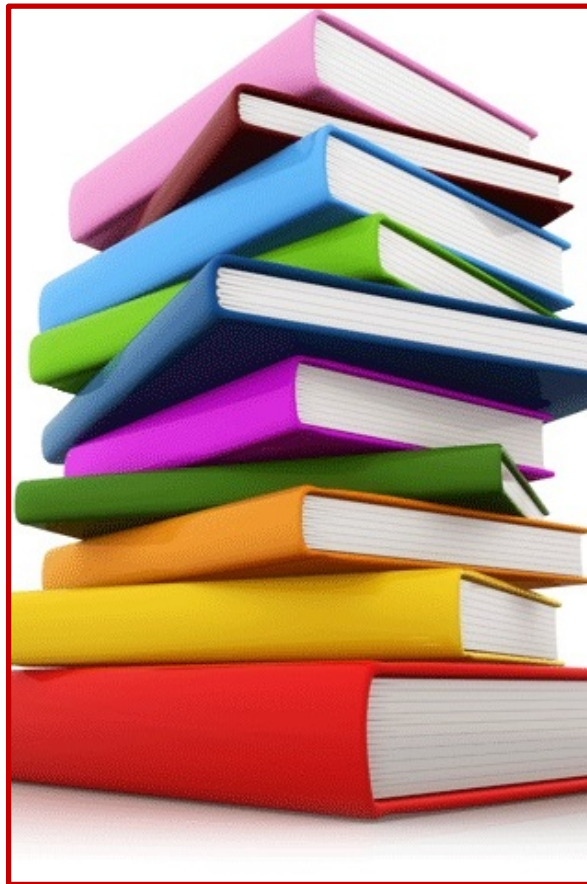


### Mini Dial-a-Nurses

Study participants expressed a desire for risk calculators to be “mini dial-a-nurses” who would provide personalized risk assessments and testing recommendations based on users’ specific sexual behaviours and HIV/STI-related concerns.

*“I was thinking about what I really wanted out of a tool like this. It’s something like a mini dial-a-nurse or like going into a walk-in clinic to just have a chat with someone and be ‘this is what I did,’ ‘this is what I experienced,’ you know, talk to me about what might have happened or something like that.”*

-- “Jeff” (gay man, 30 yrs old)



### Calculators and Educational Tools

In users’ and providers’ views, risk calculators should ideally both estimate risk and be sources of educational HIV/STI information.

*“Or it could be, I think it can be used as an educational resource as well. But a person somebody at home, if they go check STI just ‘cause they think they’re itchy or there’s something, you know there’s something. Maybe they have no symptoms but they heard something on the TV about this new super gonorrhea that’s going on. Or they had you know a fling and they’re not sure what they should do. So they’re gonna go to those questions.”*

-- “Megan” (STI clinic client, 36 yrs old)



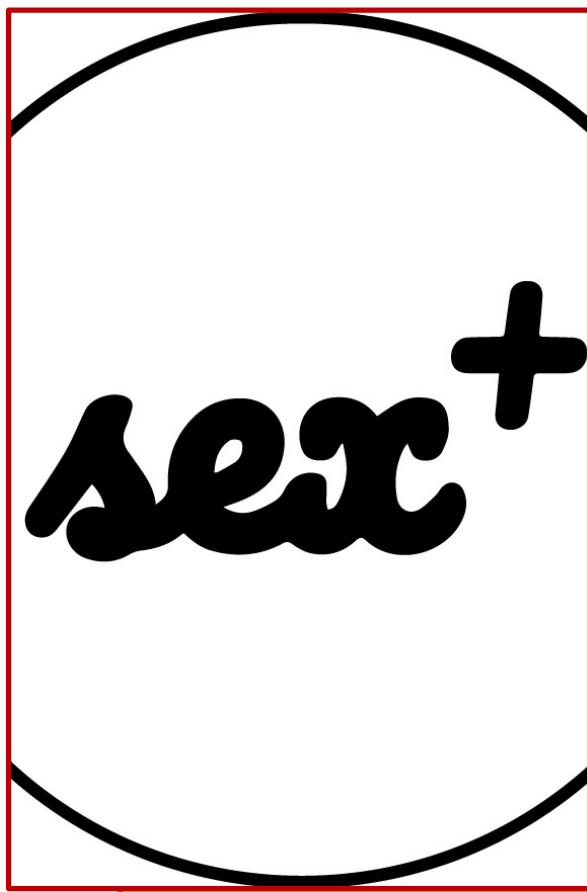
### Numeric Estimates

Gay men felt that risk calculators should offer numeric estimates, as the common name of these kind of tools indicates.

*-- I didn’t think any of them were calculators. So I was, why is this a risk calculator? ‘Cause you don’t get a calculation of what your risk is for any of these things, which is what I think that implies. There isn’t that. Instead, I think it’s just an educational tool that they’re trying to get people to interact with.*

*-- Like they’re called ‘calculators.’ But there’s nothing numeric about it.*

-- “Johnny” and “Jeff” (gay men, both 30 yrs old)



### Sex-Positive

Providers emphasized that the language and messages of risk calculators should help promote sex-positive sexual health attitudes.

*“They do seem to be quite narrowly focused. They’re always erring on the side of ‘everything is a risk.’ That whole kind of model of any time you have sex you’re at risk for everything, and sex is a really like diseasey kind of thing to be doing. So every time you touch another human being, you’re at risk for something. A lot of risk calculators work on that assumption. They bring that public health idea from the past with them.”*

-- “Rosie” (CPS nurse, 13 yrs of STI prevention work)



### Good Brands

Risk calculators also need a “good brand,” including having an acceptable name, providing satisfactory user experience and innovative interface, being endorsed or developed by recognized institutions, and offering transparency about information privacy.

*“On SmartSex resource, we came up with ‘Your Chances’ or, ‘What Are My Chances?’ I think was what we called it because again, how do we do this without giving it just this negative word right away. Instead of saying ‘What are my risks.’ [It] says ‘What are my chances,’ and then it’s a little less negative.”*

-- “Tony” (nurse, 9 yrs of STI prevention work)



### Explanations and Next Steps

HIV/STI risk calculators should also explain why certain questions were asked, provide explanations for the results obtained, and offer users actionable guidance of the next steps to take in regards to prevention and testing.

*-- “It had [to give] some sense of direction of where the person is at in terms of risk and what they should do next and a list of clinics. That can help.”*

*-- “Yeah, just something actionable. There’s no point in using these if they don’t give you something to do, I think.”*

-- “Stephen” and “Luke” (youth, 24 & 25 yrs old respectively)

## CONCLUSIONS

- Potential users and service providers identified six key components that would make for an ideal online HIV/STI risk calculator.
- None of the online calculators participants interacted with during the focus groups for this study met all of their desired features.
- While this is an exploratory study and its findings are limited, the six desirable characteristics pinpointed by participants help identify important components in the design of future risk calculators for HIV/STI prevention, testing, and linkage to treatment services.