



The STI outpatient clinic online- The use and efficacy of a full-scale STI & HIV testing applications online

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Background: Sexual Transmitted Infections (STI) are on the rise among men who have sex with men (MSM) in Amsterdam and Rotterdam. To lower the threshold for routine STI testing among a-symptomatic MSM an online STI and HIV test-service was developed for these cities.

Procedure

Through a new national prevention site, **MantotMan.nl**, men can arrange a complete test package for Chlamydia, Gonorrhoea, Syphilis and HIV. The website allows MSM to make an appointment for a STI & HIV test with an accredited testing lab, anonymously, free-of-charge and without the need to visit a doctor for a referral. After a week, test results and medical advice can be obtained online. Participants who test positive are invited to the STI clinic for further examination and treatment.

Methods

To determine the usage and efficacy of the intervention, information on usage, test completion, and results were gathered for 11 months.

To access usability and acceptability, an online questionnaire was offered after clients obtained the test results. We compiled 4 items to construct a scale for "usability" and 4 items for the scale "acceptability". All items targeted different dimensions of both constructs using a 5 point scale: 1= completely disagree to 5 = completely agree.

Results

Usage and efficacy: The weekly number of visits and testers increased over time (figure 1). In 11 months the online test service received 4818 visits and 1406 completed the intakes, 1130 were referred to the laboratories to get tested, 276 were directly referred to the STI clinic. Of the men referred to the laboratories, 47% (532/1130) got tested, of which 16% (85/532) did that after receiving an email reminder. Of the tested men 99% (530/532) obtained their test results online and 17% (84/500) had one or more positive test result (table 1). In Amsterdam 15% tested positive which is similar to the STI clinic 15% (260/1701). All men who tested positive visited the STI clinic for treatment. On average 10 days passed between referral download and testing, and additional 8 days between testing and watching the results online.

Figure 1: Weekly results on referred, tested and number of positives.

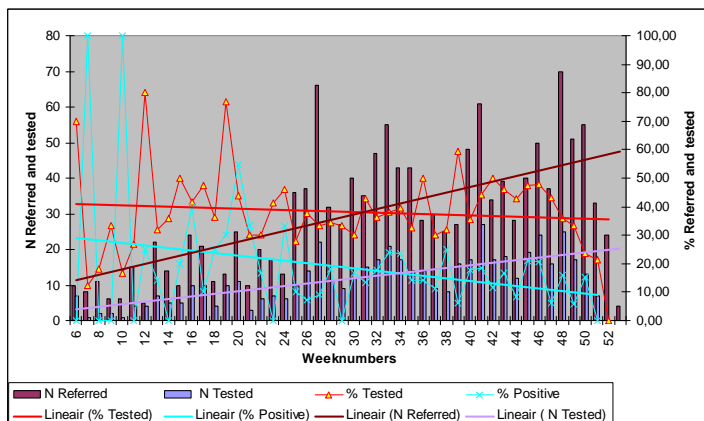


Table 1: Usage of the online STI & HIV test application between February 2008 and January 2009.

	Out side the test region	Amsterdam	Rotterdam	Total/unique
Visits	1660	2050	1108	4818 / 3555
Referral		887	519	1406 / 1273
Referral Lab		719	411	1130 / 1041
% of referral		81%	79%	80%
Referral STI clinic.		168	108	276 / 232
% of referral		19%	21%	20%
Tested		334	198	532 / 525
% of referral lab		46%	48%	47%
Results online		334	198	532
% of tested		100%	100%	100%
Results viewed		334	196	530
% of results online		100%	99%	99%

Usability and acceptability: Of the tested men 49% (256/532) completed the questionnaire. On Usability the online service scored a 4.5 (cronbachs alpha .875) and a 3.9 on acceptability (cronbachs alpha .795). Men with a positive test result scored a 4.0 on usability compared to a 4.5 for men with a negative test result (P <0.01). For acceptability this was 3.6 for men with a positive test result compared to 4 for men with a negative test result (P < 0.01).

Conclusions

- Online STI testing is feasible as a relatively high rate of the referred men got tested and compliance with the test procedures was high.
- The service proved effective in detecting MSM with asymptomatic infections since the percentage of positive diagnoses was comparable with that of the STI clinic STI.
- Although men with a positive test result evaluate the online service significantly less. The service scored well on usability and acceptability and therefore seems a good alternative for other ways of STI testing.
- Email reminders are effective in motivating men to get tested.