The use of Digital Vending Machines and HIV self-tests to reach high risk populations

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Background

- Novel strategies required to reduce undiagnosed HIV & end the HIV epidemic
- Self-testing for HIV provides an opportunity to reach populations not engaged with conventional services
- Availability of tests remains limited, costly, payment traceable

Aims

- To increase HIV testing by making self-test HIV kits available through digital vending machines in venues frequented by high risk groups in the wider community
HIV self-tests - digital vending machine

• Licensed for use in UK in 2015

• No training costs: clear user instructions; comprehensive linkage to care information for reactive testers

• Value for money £9.86 (c.f. £53.11 Sexual Health, no lab costs)

• Subsequent machines

• Availability ‘24/7’ - covers busy evening hours and weekends when staff usually unavailable or costly
Co-created with Community Business

Clinic staff approached by sauna manager:

- ~400 MSM per week - testing levels insufficient (Terrance Higgins Trust (THT) 6-8h/week)
- proportion clientele NOT engaging
- lack of anonymity seen as a barrier - having to engage with outreach workers
- evidence of high risk behaviour, but poor recognition of individual HIV risk
#iHIVtestUK

1 DROP OF BLOOD
15 MINUTES HIV SELF TEST

THIS MACHINE PROVIDES YOUR FREE HIV SELF-TEST KIT!!!
Digital vending machine

- BioSURE HIV self-tests: 3rd generation
- Wall mounted at eye level
- Touch screen
- Robust - liquid proof – secure (>300 machines, no incidents)
- Lifespan ‘hundreds of thousands’ of vends
- Little maintenance, can be done remotely
- Access website for live monitoring of sales, issues and epidemiological data
  - Age, gender, sexuality, testing history, Brighton and Hove resident

Machine in the exhibition room here today

Installed Brighton Sauna June 17
Additional machines

• In July 2018, an additional four machines were installed in venues within the same community.

• Blue: Our original machine in Brighton Sauna, dispensing free HIV self tests

• Red: Our additional ‘paid-for’ machines, dispensing HIV self tests for £9.99 per test.
  – Adult entertainment shop
  – LGBTQ support hub
  – Men only cruising bar
  – LGBTQ friendly pub and theatre
Evaluation: Jun 2017-May 2019

Total number of tests taken from vending machines
n=713

Tests taken from free venue (sauna) (Jun 17 – May 19) (n=642)
(average 27.9 tests/month)

Compares to the 6 months prior to the project when 27 tests were performed by outreach workers (average 4.5 tests/month)

Three reactive results

Tests taken from ‘paid for’ venues (Jul 18 – May 19) (n=71)
(average 1.8 tests/month/venue)
User evaluation: Jun 2017-May 2019

16% (n=112) of users responded to questionnaire

75% (n=84) of users had unprotected anal intercourse with a new or casual partner within the last year

66% (n=74) of users had taken a HIV test within the last year
Qualitative interviews: acceptability & experience

23 interviews: 10 users of vending machine, 13 sauna clients

“I think this is the best idea ever. Especially in a gay sauna. I’ve seen what happens here so I know. So this is a perfect public place. It’s practical isn’t it.”

Participant 6 (bisexual, age 53, never tested, about to marry…. female)

“It’s great it promotes awareness…. it makes people start to think, ‘Hey am I being safe today, am I taking risks that I don’t need to take?’ I just think it’s a fantastic idea”

Participant 23, age 26, MSM, last test 4 months ago

Please see poster number 20261 for more information
Qualitative interviews - concerns

• Getting a reactive result in isolation

• What to do next following a reactive result and where to get a confirmatory test

• Who can I speak to straight away
Qualitative interviews - concerns

- People may not attend clinic for comprehensive STI screening (displacement)

- Limitation to HIV testing alone, concern about other STIs
Next steps - suggestions for roll out?

- “Everywhere – it’s quick, easy and convenient”
- “Colleges, public toilets, doctors surgeries”
- “Other gay venues”
- “Saunas, gay saunas everywhere”
- South East London – Poster 21586
- Two month period of free tests in ‘paid-for’ venues
Summary

• 1st time a digital vending machine used to deliver HIV self-tests
• Collaboration with designers / target communities ensured user-centered approach
• Highly acceptable, increased targeted HIV testing
• Develop machines additional STI testing facility
• Future research will evaluate use in other populations and ensure robust linkage to care
• Assess the impact of cost on uptake of HIV self-tests from digital vending machines
Acknowledgements

Thank you to the participants and venue staff

Supported by a grant from the Public Health England (PHE) HIV Innovation Fund (2016-17)