Key oral presentations from BASHH 2016, Oxford

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INTERNET AND NEW TECHNOLOGIES
Prevalent use of dating apps amongst heterosexual attendees of genitourinary medicine clinics

Malika Mohabeer Hart, Jey Zdravkov, Komal Plaha, Farhad Cooper, Katie Allen, Lisa Fuller, Rachael Jones, Sara Day

- Paucity of research regarding use of dating apps in heterosexuals
- Objective: To quantify and explore heterosexual use of dating apps
- Method: Anonymised unlinked questionnaires given to attendees of 2 GUM clinics

Total responders: 539
Men = 377 (70%)
  - Of whom 12% had used dating apps
Women = 162 (30%)
  - Of whom 54% had used dating apps
132 (24%) ever used a dating app
Digital sex and the city
Prevalent use of dating apps amongst heterosexual attendees of genitourinary medicine clinics

Number of partners over 12 months higher in those using dating apps

Aim of using app to find partners

Group who have never used SM

Group who have used SM to find a partner
56% men, 31% report UPSI with a partner met through dating apps

24% men, 1% women report occasional recreational drug use (RDU) with a partner met through SM
  • 45% men, 87% women NEVER used RDU with a partner met through SM
  • 2% men, 0 women frequently

57% would welcome sexual health information via apps
62% would request STI testing kit via app
Use and appeal of the Online Chlamydia Pathway: qualitative findings

Catherine Aicken, Lorna Sutcliffe, Jo Gibbs, Laura Tickle, Tariq Sadiq, Catherine Mercer, Pam Sonnenberg, Claudia Estcourt, Maryam Shahmanesh

• eSTI\(^2\) Consortium has developed the Online Chlamydia Pathway (OCP)

• The OCP has been piloted for preliminary evidence of feasibility, acceptability and safety, in Exploratory Studies in Greater London

• The OCP provides a text message to receive your STI results with an option to get your treatment online if chlamydia positive with a helpline to call if necessary & follow up phone call

• Method
  • A qualitative study to explore the use and appeal of the OCP with 40 in depth interviews and thematic analysis. All participants were heterosexual
Use and appeal of the Online Chlamydia Pathway: qualitative findings

The OCP Pathway

BASHH Conference – Oxford 2016
Use and appeal of the Online Chlamydia Pathway: qualitative findings

Interviewees described using the OCP to obtain treatment *rapidly, conveniently and discreetly*, in the context of *busy lifestyles*.

A *pharmacy is a bit different to a sexual health clinic*, you can be going to a pharmacy for hayfever tablets. Woman, 18-24

There were sometimes issues when patients transitioned to ‘offline’ parts of the care pathway...

...I was trying to explain, quite quietly, because there’s a lot of old people sat behind me in the pharmacy... [...] And they [pharmacy staff] didn’t seem to know what I was on about. [...] I’m kind of there going [...] “I’ve come in for some treatment for... something?” er, trying not to say it out loud kind of thing. Woman, 18-24

...I don’t wanna say that I’m experienced in this area, having had stuff, but like, if it was my, if it was the first time I’d had something, I probably would have had more questions and I would have *wanted reassuring* about certain things, or - and I would have been more worried, a lot more worried than I was. Man 25-35

The helpline and clinical follow-up phone call were valued.
Digital health and remote digital consultations: views and experiences in sexual health clinic attendees

Jake Bayley, Marie McNulty, Michael O’Hanlon, Jennifer Hong

**Background**
Despite becoming increasingly used in NHS, there is little data of GUM users’ experience

**Aims**
Assess the views of using digital health in sexual health clinic attendees

**Method**
Patient questionnaires distributed in waiting rooms before appointment across 5 sexual and reproductive health clinics in East London
Data collected: demographics, education level, use of digital technology including websites, apps for sexual health consultations.
## Digital Health & Remote Digital Consultations

### Results

<table>
<thead>
<tr>
<th></th>
<th>Overall</th>
<th>Educated to GCSE level or less</th>
<th>Educated to A-level or higher</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currently have a device for video consultation (i.e. Skype or FaceTime)</td>
<td>84% (173/207)</td>
<td>67% (31/46)</td>
<td>90% (137/152)</td>
<td>0.001</td>
</tr>
<tr>
<td>Give consent for face to face remote digital consultation</td>
<td>51% (105/207)</td>
<td>37% (17/46)</td>
<td>56% (85/152)</td>
<td>0.01</td>
</tr>
<tr>
<td>Find web cam use acceptable for remote appointments</td>
<td>40% (81/202)</td>
<td>26% (12/46)</td>
<td>46% (68/147)</td>
<td>0.02</td>
</tr>
</tbody>
</table>
Digital Health & Remote Digital Consultations

Results
230 questionnaires returned (11% return rate)
84% (173/207) have a device for video consultation
51% (105/207) would give consent for face to face remote digital consultation
40% (81/202) find webcam use acceptable for remote appointments
Acceptability greater in those with higher educational achievement.

Conclusions
Digital remote consultations do not suit everyone so might only serve some populations better than others.
GONORRHOEA TRANSMISSION
Saliva use as a lubricant for anal sex is a risk factor for rectal gonorrhoea among men-who-have-sex-with-men, a new public health message: a cross sectional survey

Eric Chow, Vincent Cornelisse, Tim Read, David Lee, Sandra Walker, Jane Hocking, Marcus Chen, Catriona Bradshaw, Kit Fairley

Is there a plausible explanation for the fact that...?

- Oral sex is associated with anal gonorrhoea (GC)
- Anal GC occurs relatively frequently in men who use 100% condoms
- Anal GC is so common given that urethral GC is present for such a short duration at population level

**AIM**

- Evaluate if any other anal sex practices are risk factors for anal GC in MSM
- Note: STAG Study (poster P089) shows that gonococcal bacterial loads in saliva are strikingly high among MSM with untreated pharyngeal gonorrhoea

**METHOD**

- Cross-sectional survey amongst MSM attending a large urban sexual health centre
- Rectal GC identified by culture
Saliva use as a lubricant for anal sex is a risk factor for rectal gonorrhoea among men-who-have-sex-with-men, a new public health message: a cross sectional survey

Among 1312 MSM
- 4.3% had rectal GC
- Receptive oro-anal contact (rimming) 70.5%
- Penile-perianal contact ie. dipping 84.3%
- Partner’s saliva use as lubricant for anal sex 68.5%

Saliva as a lubricant significantly assoc. with rectal GC: Adj OR 2.17 CI 1.00-4.71

Crude population attributable fraction of rectal GC assoc with partner’s saliva use: 48.9% (7.9-71.7%)

Rectal GC cases identified by culture
Saliva use as a lubricant for anal sex is a risk factor for rectal gonorrhoea among men-who-have-sex-with-men, a new public health message: a cross sectional survey

LIMITATIONS of this study: Recall bias; Urban specialized clinic; Testing - culture GC testing has a poor sensitivity (~53%); Wide confidence interval of main results so need interpreting cautiously

BUT: Potentially 1/3 anal GC could be caused by used of partner’s saliva as a lubricant. Complex public health implication given it is a common part of sexual practice amongst MSM
Antiseptic mouthwash against pharyngeal *Neisseria gonorrhoeae*:
A randomised controlled trial & an *in-vitro* study pharyngeal

Eric Chow, Benjamin P Howden, Sandra Walker, David Lee, Catriona S Bradshaw, Marcus Y Chen, Anthony Snow, Stuart Cook, Glenda Fehler, Christopher K Fairley

- Gonorrhoea (GC) prevalence rising, with GC resistance to antibiotics. Pharyngeal GC seems to be an important contributor to transmission with saliva implicated

- AIM: Can Listerine® inhibit GC detection in the pharynx in a RCT

- METHOD for in vitro study:
  - \( \sim 10^8 \text{ CFU/ml} \) of a wild type of pharyngeal isolate of GC added to a series of dilutions of up to 1:32 of Listerine and to PBS
  - After 1 min of exposure, 10ul aliquots at each dilution and PBS extracted
  - Spread onto the surface of gonococcal agar plates and incubated for 2 days
Antiseptic mouthwash against pharyngeal *Neisseria gonorrhoeae*: A randomised controlled trial & an *in-vitro* study pharyngeal

Mean CFU/ml: *Neisseria gonorrhoeae* after one minute exposure to Listerine® and saline

<table>
<thead>
<tr>
<th>Dilution</th>
<th>Listerine®</th>
<th>Saline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neat</td>
<td>&lt;10²</td>
<td>&gt;10⁵</td>
</tr>
<tr>
<td>1/2</td>
<td>&lt;10²</td>
<td>-</td>
</tr>
<tr>
<td>1/4</td>
<td>2x10²</td>
<td>-</td>
</tr>
<tr>
<td>1/8</td>
<td>&lt;10⁵</td>
<td>-</td>
</tr>
<tr>
<td>1/16</td>
<td>&lt;10⁵</td>
<td>-</td>
</tr>
<tr>
<td>1/32</td>
<td>&lt;10⁵</td>
<td>-</td>
</tr>
</tbody>
</table>

The mean CFUs/ml calculated after 3 biological replicates. **Listerine found to significantly inhibit the growth of the tested strain of GC at dilutions up to 1:4.**

<10² was the lowest limit of detection as only 10ul of the post exposure sample was extracted for culture therefore cannot be certain that there were zero colonies present.
Antiseptic mouthwash against pharyngeal *Neisseria gonorrhoeae*: A randomised controlled trial & an *in-vitro* study pharyngeal

**Method for RCT:** Open-label RCT; 196/213 MSM positive for pharyngeal gonorrhoea by NAAT who were returning for treatment were randomised to Listerine® or saline at 1:4 and later at 1:1

58/196 were positive for GC pre-gargle: 25 (43%) rinsed with saline; 33 (57%) rinsed with Listerine®; $P=0.01$

![Graph showing GC positivity at both oral sites post gargle](image)}
Antiseptic mouthwash against pharyngeal *Neisseria gonorrhoeae*: A randomised controlled trial & an *in-vitro* study pharyngeal

**CONCLUSIONS**

- First study to demonstrate *in vitro* & *in vivo* that Listerine® inhibits GC

**Limitations**

- Not blinded
- Short follow up time
- Small sample size with limited power

Significant inhibition of *N. gonorrhoeae* at the tonsillar fossae demonstrated
STI SAMPLING
Self-taken extragenital samples compared with clinician-taken extragenital samples for the diagnosis of gonorrhoea and chlamydia in women and MSM

Janet Wilson, Harriet Wallace, Michelle Loftus-Keeling, Helen Ward, Claire Hulme, Mark Wilcox

- No well constructed RCT of self-taken v. clinician-taken extra-genital samples
- **Objective:** Compare sensitivity & specificity of individually analysed self-taken swabs from rectum & pharynx with individually analysed clinician-taken swabs in women & MSM

Each participant had:
- clinician-taken rectal & pharyngeal processed separately
- self-taken rectal, pharyngeal & VVS or FCU processed separately

Order of self/clinician randomised using computer generated simple randomisation

**Patient infected status (PIS)** - at least two confirmed positive samples from any of the sites including the pooled sample, or a positive culture for NG

**Site infected status (SIS)** - at least one confirmed positive sample if PIS positive
Self-taken extragenital samples compared with clinician-taken extragenital samples for the diagnosis of gonorrhoea and chlamydia in women and MSM

1191 women and 387 MSM recruited Jan 2015 to June 2016 by 5 clinicians

**MSM:** Mean age 34 years (18-77) **Women:** Mean age 25 years (16-71)

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### Gonorrhoea

<table>
<thead>
<tr>
<th><strong>MSM</strong></th>
<th>PIS: 10.1% prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SIS:</strong></td>
<td>Urethral 2.8% Rectum 6.7% Pharynx 6.2%</td>
</tr>
</tbody>
</table>

28 MSM (71.8% of NG cases) urethra – ve

<table>
<thead>
<tr>
<th><strong>Women</strong></th>
<th>PIS: 5.0% prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SIS:</strong></td>
<td>Urogenital 4.6% Rectum 3.9% Pharynx 2.9%</td>
</tr>
</tbody>
</table>

5 women (8.3% of NG cases) urogenital -ve:
- All of whom were pharyngeal only positive

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### Chlamydia

<table>
<thead>
<tr>
<th><strong>MSM</strong></th>
<th>PIS: 8% prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SIS:</strong></td>
<td>Urethra 1.8% Rectum 6.7% Pharynx 1.0%</td>
</tr>
</tbody>
</table>

24 MSM (67.7% of CT cases) urethra -ve
- 67.7% sole rectal infections

<table>
<thead>
<tr>
<th><strong>Women</strong></th>
<th>PIS: 19.1% prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SIS:</strong></td>
<td>VVS 16.5% Rectum 17.6% Pharynx 4.7%</td>
</tr>
</tbody>
</table>

30 women (13.2% of CT cases) were VVS -ve:
- 7.5% sole rectal infections
Self-taken extragenital samples compared with clinician-taken extragenital samples for the diagnosis of gonorrhoea and chlamydia in women and MSM

### Gonorrhoea

Comparing clinician with self taken

<table>
<thead>
<tr>
<th>Rectal NG</th>
<th>Self</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>64</td>
<td>67</td>
</tr>
<tr>
<td>-</td>
<td>5</td>
<td>1506</td>
</tr>
<tr>
<td>Total</td>
<td>69</td>
<td>1578</td>
</tr>
</tbody>
</table>

Two-tailed McNemar test $p = 0.73$

### Chlamydia

Comparing clinician with self taken

<table>
<thead>
<tr>
<th>Rectal CT</th>
<th>Self</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>217</td>
<td>224</td>
</tr>
<tr>
<td>-</td>
<td>11</td>
<td>1354</td>
</tr>
<tr>
<td>Total</td>
<td>228</td>
<td>1578</td>
</tr>
</tbody>
</table>

Two-tailed McNemar test $p = 0.48$

<table>
<thead>
<tr>
<th>Pharyngeal NG</th>
<th>Self</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>51</td>
<td>54</td>
</tr>
<tr>
<td>-</td>
<td>5</td>
<td>1522</td>
</tr>
<tr>
<td>Total</td>
<td>56</td>
<td>1576</td>
</tr>
</tbody>
</table>

Two-tailed McNemar test $p = 0.73$

<table>
<thead>
<tr>
<th>Pharyngeal CT</th>
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<tr>
<td>+</td>
<td>52</td>
<td>56</td>
</tr>
<tr>
<td>-</td>
<td>4</td>
<td>1520</td>
</tr>
<tr>
<td>Total</td>
<td>56</td>
<td>1573</td>
</tr>
</tbody>
</table>

Two-tailed McNemar test $p = 1.0$

No difference between self versus clinician-taken for gonorrhoea or chlamydia
Self-taken extragenital samples compared with clinician-taken extragenital samples for the diagnosis of gonorrhoea and chlamydia in women and MSM

- First adequately powered RCT to demonstrate self-taken samples are equivalent to clinician-taken samples for the diagnosis of extra-genital NG and CT in MSM and women

- Good concordance between self and clinician-taken samples with high sensitivity and specificity

- In women 8.3% of NG and 13.2% of CT would be missed by just genital sampling

- In women the rectum was the most prevalent site for CT
Extra-genital samples for gonorrhoea and chlamydia in women and MSM
Self-taken samples analysed separately compared with self-taken pooled samples
Janet Wilson, Harriet Wallace, Michelle Loftus-Keeling, Helen Ward, Claire Hulme, Mark Wilcox

- Majority of gonorrhoea (NG) and chlamydia (CT) infections in MSM are extra-genital
- Extra-genital infections frequently recognised in women, often when VVS negative
- Rectal and pharyngeal swabs trebles the diagnostic cost

**Objective:** Compare sensitivity and specificity of pooled self-taken samples from genital tract, rectum & pharynx with self-taken samples analysed individually in women & MSM

Each participant had three sets of samples:
- clinician-taken rectal and pharyngeal processed separately
- self-taken rectal, pharyngeal and VVS or FCU processed separately
- self-taken rectal, pharyngeal and VVS or FCU processed pooled

Order randomised using computer generated simple randomisation
Extra-genital samples for gonorrhoea and chlamydia in women and MSM
Self-taken samples analysed separately compared with self-taken pooled samples

1191 women and 387 MSM recruited Jan 2015 to June 2016 by 5 clinicians
**MSM:** Mean age 34 years (18-77)  **Women:** Mean age 25 years (16-71)

### Gonorrhoea

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<tr>
<th>Gender</th>
<th>PIS: Prevalence</th>
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</tr>
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<tbody>
<tr>
<td><strong>MSM</strong></td>
<td>10.1%</td>
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<td></td>
<td></td>
<td>Pharynx 6.2%</td>
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<tr>
<td></td>
<td></td>
<td>Pharynx 2.9%</td>
</tr>
<tr>
<td></td>
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<td>(8.3% of NG cases)</td>
</tr>
<tr>
<td></td>
<td>urogenital -ve:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• All of whom were pharyngeal only positive</td>
<td></td>
</tr>
</tbody>
</table>

### Chlamydia

<table>
<thead>
<tr>
<th>Gender</th>
<th>PIS: Prevalence</th>
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</tr>
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<tbody>
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</tr>
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<td></td>
<td></td>
<td>Pharynx 1.0%</td>
</tr>
<tr>
<td></td>
<td>24 MSM</td>
<td>(67.7% of CT cases)</td>
</tr>
<tr>
<td></td>
<td>• 67.7% sole rectal infections</td>
<td></td>
</tr>
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<td>VVS 16.5%</td>
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<td></td>
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<td></td>
<td>were VVS -ve:</td>
<td></td>
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<td></td>
<td>• 7.5% sole rectal infections</td>
<td></td>
</tr>
</tbody>
</table>
Extra-genital samples for gonorrhoea and chlamydia in women and MSM

**Gonorrhoea**

<table>
<thead>
<tr>
<th></th>
<th>Pooled</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual swabs</td>
<td>+93 3 96</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-2 1471 1473</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>95 1474 1570</td>
<td></td>
</tr>
</tbody>
</table>

Two-tailed McNemar test $p = 1.00$

No difference between separately and pooled

**Chlamydia**

<table>
<thead>
<tr>
<th></th>
<th>VVS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>VVS</td>
<td>+194 3</td>
<td>197</td>
</tr>
<tr>
<td></td>
<td>-25 962</td>
<td>987</td>
</tr>
<tr>
<td>Total</td>
<td>219 965</td>
<td>1184*</td>
</tr>
</tbody>
</table>

*5 false positive pooled, 1 false positive VVS

Two-tailed McNemar test $p = 0.00003$

Pooled sample performed better than VVS

**Rectal**

<table>
<thead>
<tr>
<th></th>
<th>Rectal</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rectal</td>
<td>+24 2 26</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-5 355 360</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>29 357 386*</td>
<td></td>
</tr>
</tbody>
</table>

*1 false positive pooled

Two-tailed McNemar test $p = 0.46$
Extra-genital samples for gonorrhoea and chlamydia in women and MSM

• Pooled samples performed as well as samples analysed separately in the diagnosis of NG missing 1 sole VVS and 2 rectal infections

• Pooled samples were superior to a VVS for diagnosing CT

• A pooled sample has equal efficacy for NG and is superior to a VVS for CT at the current laboratory cost of a VVS so is an affordable option
Rectal chlamydia infection in women: Have we been missing the point?

Wallace H, M Loftus-Keeling, H Ward, C Hulme, M Wilcox, JD Wilson

- Using only vulvovaginal NAATs for CT & NG in women may miss infection at extragenital sites
- Identifying rectal CT may affect the management required

**METHODS**

- Inclusion: 16yr+, no antibiotics in last 4 wks, no rectal symptoms, willing for extragenital tests
- NAATs from pharyngeal and rectal sites for CT & NG using Aptima Combo 2:
  - 1 x clinician-taken sample
  - 2 x self samples (1 analysed individually, 1 pooled into single collection pot together with VVS NAATs)
- Patient infected status: at least 2 positive confirmed samples
- Site infected status: PIS positive plus at least 1 positive from site
Rectal chlamydia infection in women: Have we been missing the point?

- CT prevalence higher on rectal NAATs than VVS in this population: rectal 17.5% vs VVS 16.5%

- Of women testing positive for sole rectal or rectal/pH CT: 41% reported no previous anal sex

- NOT testing for rectal CT infection in this group
  - would have missed 10% of total CT infections (sole rectal or rectal/ph infection only)
  - possible incomplete management in 95% of those who tested positive for CT on VVS who were also rectally infected

- Rectal CT infection was NOT significantly associated with:
  - Self report of previous anal sex
  - Self report of a previous STI
  - Presentation with symptoms of urogenital infection

- Is it time for a discussion on universal rectal screening in women?
Triage review: Should they stay, or should they go?

Susanna Currie, Elizabeth Nicol, Gabriel Schembi

• BASHH Guidance: 48 hour access for all, with on the day review for emergencies

• Manchester Centre for Sexual Health: Triage forms since 2010

AIM

• Review the diagnoses of patients who fill in triage forms & determine if triage is effective

• A retrospective review of all triage forms completed 5/1/15 – 24/3 & the diagnoses of those patients
Triage review: Should they stay, or should they go?

<table>
<thead>
<tr>
<th>Condition</th>
<th>n</th>
<th>% accepted</th>
<th>% initially turned away</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEPSE</td>
<td>7</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>UTI</td>
<td>4</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>Herpes</td>
<td>37</td>
<td>78</td>
<td>22</td>
</tr>
<tr>
<td>PID/Epididymo-orchitis</td>
<td>26</td>
<td>65</td>
<td>35</td>
</tr>
<tr>
<td>Contact of infection</td>
<td>22</td>
<td>64</td>
<td>36</td>
</tr>
<tr>
<td>Gonorrhoea</td>
<td>19</td>
<td>58</td>
<td>42</td>
</tr>
<tr>
<td>STI diagnosed elsewhere</td>
<td>12</td>
<td>58</td>
<td>42</td>
</tr>
<tr>
<td>Non-specific GU infection</td>
<td>37</td>
<td>54</td>
<td>46</td>
</tr>
<tr>
<td>Chlamydia</td>
<td>33</td>
<td>51</td>
<td>49</td>
</tr>
<tr>
<td>HIV</td>
<td>2</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Primary syphilis</td>
<td>2</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Hepatitis B</td>
<td>2</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Candidiasis or BV</td>
<td>64</td>
<td>42</td>
<td>58</td>
</tr>
<tr>
<td>Molluscum or Warts</td>
<td>65</td>
<td>15</td>
<td>85</td>
</tr>
<tr>
<td>Late syphilis</td>
<td>2</td>
<td>0</td>
<td>100</td>
</tr>
</tbody>
</table>
Triage review: Should they stay, or should they go?
HPV
HPV4 vax was introduced for MSM <27y in this sexual health service in 2012

The aim was to:

- To deliver 3 doses of HPV4 to younger MSM
- To increase engagement and STI testing by younger MSM at integrated sexual health services

Method

- HPV4 offered at time 0, 2-4 and 6-12 months with STI testing, clinic call/recall, alongside care and support as appropriate
- Electronic case note review was conducted to review all eligible MSM at end of 2015
Human papillomavirus vaccination and STI screening in men who have sex with men

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dose 1</td>
<td>239</td>
<td>255</td>
</tr>
<tr>
<td>Dose 2</td>
<td>187 (78%)</td>
<td>194 (76%)</td>
</tr>
<tr>
<td>Dose 3</td>
<td>148 (62%)</td>
<td>140 (56%)</td>
</tr>
</tbody>
</table>

* 2015 figures are pro rata: where 12 months has passed. Completion rates rise as clients continue to receive HPV4 at later attendances

At dose 1, 2, 3 99%, 84%, 87% did a STI screen respectively
Of which 32%, 14%, 16% had an STI

<table>
<thead>
<tr>
<th>Factor</th>
<th>Numbers (%)</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age &lt;21</td>
<td>57/119 (48%)</td>
<td></td>
</tr>
<tr>
<td>Age &gt;21</td>
<td>228/420 (54%)</td>
<td>p = 0.008</td>
</tr>
<tr>
<td>HIV –ve</td>
<td>228/420 (54%)</td>
<td></td>
</tr>
<tr>
<td>HIV +ve</td>
<td>61/74 (82%)</td>
<td>p = 0.0001</td>
</tr>
<tr>
<td>Prior clinical HPV</td>
<td>41/57 (72%)</td>
<td></td>
</tr>
<tr>
<td>No clinical HPV</td>
<td>248/438 (56%)</td>
<td>p = 0.03</td>
</tr>
<tr>
<td>Homosexual</td>
<td>231/379 (61%)</td>
<td></td>
</tr>
<tr>
<td>Bisexual</td>
<td>38/77 (49%)</td>
<td>p = 0.02</td>
</tr>
<tr>
<td>White British</td>
<td>81/172 (47%)</td>
<td></td>
</tr>
<tr>
<td>White Other</td>
<td>66/102 (65%)</td>
<td>p = 0.006</td>
</tr>
<tr>
<td>Asian</td>
<td>65/98 (66%)</td>
<td>p = 0.003</td>
</tr>
<tr>
<td>Black</td>
<td>54/80 (68%)</td>
<td>p = 0.003</td>
</tr>
</tbody>
</table>
Human papillomavirus vaccination and STI screening in men who have sex with men

• The 3 dose completion rates observed were commensurate with expected for a targeted vaccination programme

• HPV4 Completion was associated with older age, HIV status, prior experience of HPV disease, MSM self identifying as homosexual & non white British ethnicities.

• There was a high uptake of concurrent STI testing and a high rates of incident STI

• HPV vaccination within sexual health services is an effective engagement strategy for young MSM
Rapid fall in quadrivalent vaccine targeted human papillomavirus genotypes in heterosexual men following the Australian female HPV vaccination programme: an observational study from 2004 to 2015
Eric Chow, Dorothy Machalek, Sepehr Tabrizi, Jennifer Danielewski, Glenda Fehler, Catriona Bradshaw, Suzanne Garland, Marcus Chen, Christopher Fairley, Sandra Walker

• Australia introduced quadrivalent HPV vax(4vHPV) in 2007 for young women; 2013 for young men

• Aim To examine the prevalence of 4vHPV and 9vHPV targeted vaccine genotypes among predominantly unvaccinated heterosexual young men in Australia between 2004-2015

• Method 1466 young heterosexual men who tested positive for chlamydia included prevalence of types 6,11,16,27,31,33,45,42,52,58 detected in stored urine or urethral swab sample each year stratified by country of birth

• Results 1466 men included: 633 (43%) Australian-born men 768 (52%) Overseas-born men 65 (4%) had an unknown place of birth
Rapid fall in quadrivalent vaccine targeted human papillomavirus genotypes in heterosexual men following the Australian female HPV vaccination programme: an observational study from 2004 to 2015

- 4vHPV genotypes decreased from 20% in 2004/5 to 3% in 2014/15 (p=<0.001) among Australian-borne men
  - With a greater decline in Australian born men aged <21y (31% to 0%)

- No trends observed between any HPV genotypes or HPV 31,33,45,52,58

- Decline in 16&18 but not 6&11 in the post vaccination period in men who recently arrived in Australia from countries with a bivalent programme

- Study shows herd immunity from the female vaccination programme with HPV immunity according to the HPV programme in the country of origin
REFUGEE
SEXUAL HEALTH
The emergence of the “jungle” camp in Calais has been described as a humanitarian crisis.

There are internationally recognised minimum standards for provision (MISP) of sexual and reproductive care in a crisis situation.

Clinic attendances over a 9 week period at a NGO primary care clinic.
Sexual and reproductive health consultations in an NGO primary care facility over a nine week period

<table>
<thead>
<tr>
<th>Women aged 15-44</th>
<th>Men aged 15-44</th>
</tr>
</thead>
<tbody>
<tr>
<td>17 women (1.8/wk)</td>
<td>Requested pregnancy tests</td>
</tr>
<tr>
<td>9 women (1/wk)</td>
<td>Requested termination of pregnancy</td>
</tr>
<tr>
<td>2 women (0.7/wk)</td>
<td>Consultation where sexual violence disclosed</td>
</tr>
<tr>
<td>22 men (0.4% overall population)</td>
<td>Advice or treatment for STI</td>
</tr>
<tr>
<td>12 (1.3/wk)</td>
<td>Requests for contraception</td>
</tr>
</tbody>
</table>

MISP for sexual & reproductive health NOT MET

- Leader to implement MISP – reproductive health officer in place NOT MET
- Prevent sexual violence and assist survivors NOT MET
- Reduce transmission of HIV NOT MET
- Prevent obstetric & newborn morbidity/mortality Partially met
- Plan for comprehensive sexual health services integrated into primary health care NOT MET
HIV TESTING
HIV self-sampling service
Luis Guerra, Louis Logan, Tim Alston, Noel Gill, Ryan Kinsella, Anthony Nardone

**Background**
Public Health England, with Local Authorities launched a free HIV self-sampling service nationwide in November 2015
People order test kit via [www.freetesting.hiv](http://www.freetesting.hiv). Sample collected at home and sent for testing

**Aim**
Determine who is accessing the service and whether it reached most at-risk groups e.g. MSM and Black Africans

**Method**
Disaggregated anonymised data of users who ordered kit from November 2015 to March 2016 were analysed
Ethnicity, gender, sexual orientation, local authority residency and self-reported HIV testing information
<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Requested</th>
<th>Returned</th>
<th>Reactive</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSM</td>
<td>18670</td>
<td>8439</td>
<td>89</td>
<td>1.05%</td>
</tr>
<tr>
<td>Heterosexual</td>
<td>5016</td>
<td>2045</td>
<td>28</td>
<td>1.37%</td>
</tr>
<tr>
<td>Others</td>
<td>417</td>
<td>107</td>
<td>2</td>
<td>1.29%</td>
</tr>
<tr>
<td>Trans</td>
<td>224</td>
<td>72</td>
<td>3</td>
<td>4.17%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>All Heterosexuals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
</tr>
<tr>
<td>White</td>
<td>899</td>
</tr>
<tr>
<td>Black African</td>
<td>781</td>
</tr>
<tr>
<td>Black others</td>
<td>174</td>
</tr>
<tr>
<td>Asian</td>
<td>121</td>
</tr>
<tr>
<td>Others</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>2045</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Kits Ordered</th>
<th>Kits Returned</th>
<th>Reactive</th>
<th>Reactivity</th>
<th>% Ordered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 1 year ago.</td>
<td>8773</td>
<td>4053</td>
<td>45</td>
<td>1.11</td>
</tr>
<tr>
<td>Never tested.</td>
<td>9020</td>
<td>3730</td>
<td>40</td>
<td>1.07</td>
</tr>
<tr>
<td>Within the last year.</td>
<td>6328</td>
<td>2841</td>
<td>33</td>
<td>1.16</td>
</tr>
<tr>
<td>Unknown</td>
<td>206</td>
<td>87</td>
<td>4</td>
<td>4.60</td>
</tr>
<tr>
<td>TOTAL</td>
<td>24327</td>
<td>10711</td>
<td>122</td>
<td>1.14</td>
</tr>
</tbody>
</table>
HIV self-sampling service

Results
17,114 kits ordered, 51% returned, 1.4% reactive rate

82% kits returned were from MSM with 1.34% reactive rate; 32% reported never testing

18% kits returned from heterosexuals, of these 42% from Black Africans with 1.54% reactive rate; 31% reported never tested.

Conclusions
National self-sampling service has been successful at engaging most at-risk populations who had not tested for HIV
PARTNER NOTIFICATION
**Background**
Partner notification reduces risk of onward transmission of STIs but there are logistical challenges to its effectiveness.
One key challenge is verification of PN by healthcare worker (HCW).

**Aim**
To test impact of novel way of delivering PN.

**Method**
Cloud-based online tool developed to support HCWs for PN. Using interactive digital Contact Slip (idCS). Tool helps to notify partners, find local sexual health service, record each step of PN process and to close the loop.
Pilot launched January 2016. Analysis of cases over 49 days.
Hitting the bull’s eye: partner notification
real-time metrics

... we have **data** to show that information technology enables effective partner notification

The idCS pilot launched on 27 January 2016

899

*Index Patients*

---

1,543

*Contactable Partners*

---

40% of contactable partners were notified using the tool

55% of those notified opened the link

30% of those who opened the link were seen by a Health Care Worker

Based on the data collected between 27/01/2016 - 02/07/2016
Hitting the bull’s eye: partner notification real-time metrics

Results
259 index patients across 9 providers. 9 different STIs. 421 contacts declared, 162 (38%) informed using the tool. 96 partners contacted (59%) opened link in text message or email sent to them. 30 (31%) seen and tested by HCW. Partners were tested in 13 centres. Median time to self verification 0 days (range 0-27 days). Median time to partner being seen 2 days (0-47 days).

Conclusion
PN tool demonstrated feasibility to support partners find local service to get tested expeditiously. More work needs to be done to increase the number of partners being informed and get tested.
Partner notification bureau in action

Gill Bell

Background
Centralised management of positive results by a “partner notification bureau” was suggested by the National Chlamydia Screening Programme.
Centralised reporting of gonorrhoea positives to SHS introduced in April 2014 to manage a gonorrhoea outbreak among students
Centralised reporting of chlamydia positives introduced September 2015

Aim
To evaluate effectiveness of centralised management of treatment and PN

Method
All positive CT & GC from primary care copied to health advisor (HA) team. HA admin contacts GP surgery for patient contact details. HA contacts pts to discuss diagnosis, treatment options, partner notification and repeat test if necessary. Further face to face contact if attending for treatment.
Retrospective review of HA notes to assess outcomes including: patients informed of results, confirmed treatment at a service, PN discussion and partner attendances.
Partner notification bureau in action

Results
Between Sept 14 to Aug 15: 46 cases of gonorrhoea diagnosed, 45 informed, confirmed treatment and PN discussion by phone. No of partners reported/verification per was 0.8.
Chlamydia cases – 457 positives, 440 (96%) were informed & had PN discussion, 448 (98%) confirmed and treated. No of partners per case 0.98.
PN workload increased by 10%.

Conclusion
Centralised management of gonorrhoea and chlamydia results is feasible and effective
Treatment rates exceed NCSP standard of 95%
PN outcome rates exceed national standard of 0.6
Additional resources required: HA workload increased by 10%
PRIMARY CARE
Confidentiality and GP disclosure in GUM clinics
Qiang Lu, Emily Clarke, Raj Patel, Harriet Eatwell, Rohilla Maarij

Background
Patients are asked for permission so that GUM clinic can contact GPs and a large minority decline this. However, when STI is diagnosed and patient cannot be contacted, sometimes breaches have to be made to contact GP.

Aim
To determine why some patients decline GP contact and views on contacting them against their wish especially of an STI needs to be treated and patient cannot be contacted.

Method
10 semi-structured face-to-face interviews with patients attending GUM clinic.
Confidentiality and GP disclosure in GUM clinics

Results
4 areas of concern for patients:
• potential negative implications of recording sexual health problems on GP records including life insurance and job applications
• Receptionists in GP surgeries breaking confidentiality and being judgemental
• Perceived irrelevance to GP care
• Patients close relationship with GP

Conclusions
Need to improve patients’ confidence in confidentiality protections in general practice. GUM clinics need to explain why communication with GP might sometimes be needed.
Role of primary care in diagnosis of STIs in England

• Emma Beaumont, Martina Furegato, Hamish Mohammed, Gwenda Hughes

Background
Information about STIs from GUM clinics have been collected routinely for years but little is known about contribution from general practice

Aims
To assess trends in diagnosis rates of selected STIs from general practice

Method
Retrospective analysis of diagnoses of chlamydia, gonorrhoea, genital warts (1st episode) and genital herpes (1st episode) made in primary care in England 2005 to 2014 using the Clinical Practice Research Datalink (CPRD)

CPRD provides anonymised records from patients registered at a subset of GPs in the UK. Represents approximately 6.9% of the UK population. Good representation by age, gender and ethnicity
Number of estimated diagnoses in 2014:

**GP vs GUM**

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Number of Diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlamydia</td>
<td>106,865</td>
</tr>
<tr>
<td>Gonorrhoea</td>
<td>34,958</td>
</tr>
<tr>
<td>Genital herpes</td>
<td>31,777</td>
</tr>
<tr>
<td>Genital warts</td>
<td>70,612</td>
</tr>
</tbody>
</table>

- Chlamydia: 6%
- Gonorrhoea: 4%
- Genital herpes: 30%
- Genital warts: 30%
Trends in rates per 100,000 of diagnosis by gender in GP

**Chlamydia**
- Female: Decreasing trend from 2005 to 2014.

**Gonorrhoea**
- Female: Fluctuating trend with a general decrease from 2005 to 2014.
- Male: Decreasing trend from 2005 to 2014.

**Genital Herpes**
- Female: Steady trend from 2005 to 2014.

**Genital Warts**
- Female: Decreasing trend from 2005 to 2014.
- Male: Decreasing trend from 2005 to 2014.
Role of primary care in diagnosis of STIs in England

Conclusions

GPs make an important contribution to the diagnosis of STIs.

Higher rates of diagnosis of chlamydia, gonorrhoea and genital herpes are seen among women.

Rates of diagnosis in GP have decreased for chlamydia and genital warts. Similar patterns were seen in rates of genital warts diagnosed in GUM clinics.

Need to investigate the testing patterns over time in relation to other settings to understand the role that GPs play in the wider context of STI epidemiology.