Third Joint Conference
of the
British HIV Association (BHIVA)
with the
British Association for Sexual Health and HIV (BASHH)

1–4 April 2014

Arena and Convention Centre · Liverpool
Dr Ann Sullivan
Chelsea and Westminster Hospital, London
Dr Ann Sullivan
Chelsea and Westminster Hospital, London

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<thead>
<tr>
<th>Speaker Name</th>
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<tbody>
<tr>
<td>Dr Ann Sullivan</td>
<td>AK Sullivan and Chelsea and Westminster own the Intellectual Property of ePN</td>
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**COMPETING INTEREST OF FINANCIAL VALUE > £1,000:**

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Partner notification for HIV: maximising positive outcomes

AK Sullivan
Chelsea and Westminster Hospital NHS Foundation Trust
London UK
HIV PN

- Data on the effectiveness of HIV PN
- Identify areas for improvement
- Some early steps
## HIV PN and new HIV diagnoses

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“HIV Partner Notification: a missed opportunity?” 2012
2013 BASHH BHIVA audit of HIV partner notification

HIV prevalence in susceptible contacts 21%
One new case of HIV for every 10 index cases

Index cases
12% PN not done or not documented

Contacts
24% informed but outcome not known
31% not informed
Variation in Prevalence by Contact Type

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<th>Contact type</th>
<th>Number of contacts tested</th>
<th>% prevalence among tested contacts</th>
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<tr>
<td>All</td>
<td>1399</td>
<td>20.9</td>
</tr>
<tr>
<td>Sexual contacts:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regular</td>
<td>890</td>
<td>26.5</td>
</tr>
<tr>
<td>Ex-regular</td>
<td>176</td>
<td>13.6</td>
</tr>
<tr>
<td>Casual known</td>
<td>197</td>
<td>11.7</td>
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**Partnership type** only independent predictor of prevalence in contacts
## PN Non-Completion by Contact Type

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<th>Total audited</th>
<th>Potentially at risk and not informed</th>
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<tr>
<td>All</td>
<td>3211</td>
<td>983 (30.6%)</td>
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<tr>
<td><strong>Sexual contacts:</strong></td>
<td></td>
<td></td>
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<tr>
<td>Regular</td>
<td>1422</td>
<td>130 (9.1%)</td>
</tr>
<tr>
<td>Ex-regular</td>
<td>577</td>
<td>238 (41.2%)</td>
</tr>
<tr>
<td>Casual known</td>
<td>562</td>
<td>189 (33.6%)</td>
</tr>
<tr>
<td>Casual unknown</td>
<td>377</td>
<td>341 (90.5%)</td>
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**PN Outcomes**

Per index case (BASHH PN Statement)

0.45 contacts verified by health care professional (HCP) as having attended a service

regional range 0.29-0.75

0.64 contacts attended a service including patient report,

regional range 0.43-1.0

Number of contactable contacts

52.9% contacts verified by HCP as having attended a service,

regional range 32.6-74.6

clinic lower + upper quartiles 37.3-80.0

74.6% contacts attended a service including patient report,

regional range 61.2-93.6

clinic lower + upper quartiles 68.2-100
PN Outcomes

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74.6% contacts attended a service including patient report, regional range 61.2-93.6

  clinic lower + upper quartiles 68.2-100

Case-mix unlikely to account for this variation
Audit Conclusions

• High HIV prevalence; highest prevalence in regular partners
• PN completion substantially higher for regular sexual partners than ex-regular or known casual ones
• Wide variation in numbers of contacts attending per index case
Type of PN

Two studies have suggested superiority of contract and provider referral - resulted in more partners presenting for care and testing positive than simple patient referral

Landis, 1992 (USA, n=74)
Number of partners notified 1.71 [1.24 – 2.19]

Brown, 2011 (Malawi, n=158)
HIV positive contacts 0.12 [0.07 – 0.17]

[mean difference, 95%CI]

Insufficient evidence currently – systematic review (only 2 HIV of 26 trials)

Ferreira, 2013
Index and contact communication

“What do you think someone could say to you or tell you that might prompt you to go for an STI screening?”

- Partner notification from someone diagnosed with an STI: \textbf{31.8\%}
- As part of a regular screening: \textbf{18.2\%}

Sigma Research, 2012

Communication between partners is a critical point in effective PN strategies

Young, 2007
HIV PN - How can we improve positive outcomes

- Data on the effectiveness of HIV PN
- Identify areas for improvement
- Some early steps

Outcomes (and process) as perceived by index and contacts should positive as well
How can we improve positive outcomes

PN Data and audit reports
Index or contact characteristics which may lead to improved outcomes by focusing resources
  Acute infection – RITA
  MSM
  Partner type
BASHH/BHIVA reports - National, regional and clinic level data
Services (individually, regionally) – review audit data to identify variability, underperformance, areas of good practice. Undertake quality improvements

Index  12% PN not done or not documented
Contact  24% informed outcome not known
         31% not informed
How can we improve positive outcomes

Documentation

Coding

Data capture and reports (GUMCAD 3, HARS)

Agree definitions, outcomes and standards
How can we improve positive outcomes

Process

Type of PN – is provider and contract ‘better’?

Patient and contact engagement/empowerment with PN contacts may be influenced by PN message they receive from the index. Enhanced patient referral-additional verbal or written support. (BASHH generic PN leaflet; HIV specific?)

Access to new methods (e.g. GMFA, ePN)

Review delivery over time and staff involved

Service capacity and staff competencies

Cost effectiveness analysis
HIV PN

• Data on the effectiveness of HIV PN

• Identify areas for improvement

• Some early steps
BASHH/NAT/SSHA HIV PN stakeholder day

Aim
agree – definitions
outcomes
standards

Pilot in clinics – London/outside
size
different case mix
different IT systems
with/without SHA
GU/ID

Agree national standards - with additional data to enable understanding of any variation
Definitions - Contacts

Three categories

2 for which the outcome is ascertainable or already known

Contactable (status unknown)- means of contact available [e.g. working mobile, email, sufficient demographic data to generate means of contact - name+dob/address]

Outcome already known - HIV status already determined; deceased

Uncontactable – a contact for whom the outcome is unknown and for whom the index (or HCP) has no means of contact
Definitions

HCP verified outcome
Outcome established directly by HCP e.g. by speaking directly with the contact or by obtaining information about the contact from their own or other healthcare services
Outcomes and Standards

Timelines

72 hours - clinically important at time of diagnosis to assess need for PEP

4 weeks from diagnosis for documented agreed plan for all contacts – 97%

3 months – outcomes recorded and measured against standards

6 and 12 months - worth continuing if unresolved

Potentially need for repeat PN with new potential risk
Outcomes

Denominators

1. Total number of index cases
2. Total number of contactable contacts and contacts whose outcome is already known

Additional data

3. Total number of contacts
Outcomes

Numerators

1. PN completed
   HIV status already determined
   Deceased
   Those of unknown status who tested

Additional data

2. Number of contactable contacts
3. Number notified, outcome unknown
Standards
Number of contactable contacts and contacts whose outcome is already known per index case within the look back period for whom the PN process is complete within 3 months

Proportion (%) of contactable contacts and contacts whose outcome is already known within the look back period for whom the PN process is complete within 3 months

Additional measure
Contactable contacts/total number of contacts
Standards

PN completed/total number of index cases
0.6 HCP verified

PN completed/total number of index cases
0.8 Index reported

PN completed/contactable contacts and contacts whose outcome is already known
65% HCP verified

PN completed/contactable contacts and contacts whose outcome is already known
85% Index reported
Acknowledgements

BASHH National Audit Group

V Apea  A Menon-Johansson
E Buitndam  G Morris
A de Burgh-Thomas  S Quah
C Carne  A Rae
D Daniels  M Rayment
J Dhar  L Sanmani
S Estreich  C Sethi
J Evans-Jones  W Spice
M Farazmand  A Sukthanker
M Gupta  A Sullivan
J Hardie  S Tayal
D Harte  G Wildman
C Knapper  E Wilkins
M Lechelt  A Williams
H McClean (Chair)

BHIVA Audit and Standards Sub-Committee

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D Churchill  E Ong (Chair)
K Clay  M Rayment
H Curtis (co-ordinator)  C Sabin
V Delpech  A Schwenk
M Desai  A Sullivan
K Doerholt  H Veerakathy
S Edwards  E Wilkins
A Freedman
Y Gilleece
P Gupta

All clinical services who provided audit data
Attendees at the BASHH/NAT/SSHA stakeholder day
Mike Rayment, Yusef Azad, Claudia Estcourt
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