

# PARTNER NOTIFICATION: INCREASING EFFECTIVENESS WITH MODERN COMMUNICATION TECHNOLOGY

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# Background

- Prevalence of sexually transmitted infections (STI) in STI contacts is high
- UK standards recommend a partner notification (PN) ratio of 0.6 partners tested per index case within 1 month (0.4 in large conurbations) <sup>[1]</sup>
- Traditional modes of PN:
  - The index patient, the provider or both
- Online platforms may reduce costs, expand coverage and increase efficiency
- SXT <sup>[2]</sup> → Online PN tool using interactive digital contact slips

[1] H McClean, K Radcliffe, A Sullivan, I Ahmed-Jushuf. 2012 BASHH statement on partner notification for sexually transmissible infections. Int J of STD & AIDS. Vol 24, Issue 4, 2013

[2] <https://sxt.org.uk/>

# Online PN: How it works

## NOTIFY PARTNERS: AT THE CLINIC



Consultation with patient



Fill in partner details



SXT notifies partners

## NOTIFY PARTNERS: AWAY FROM CLINIC



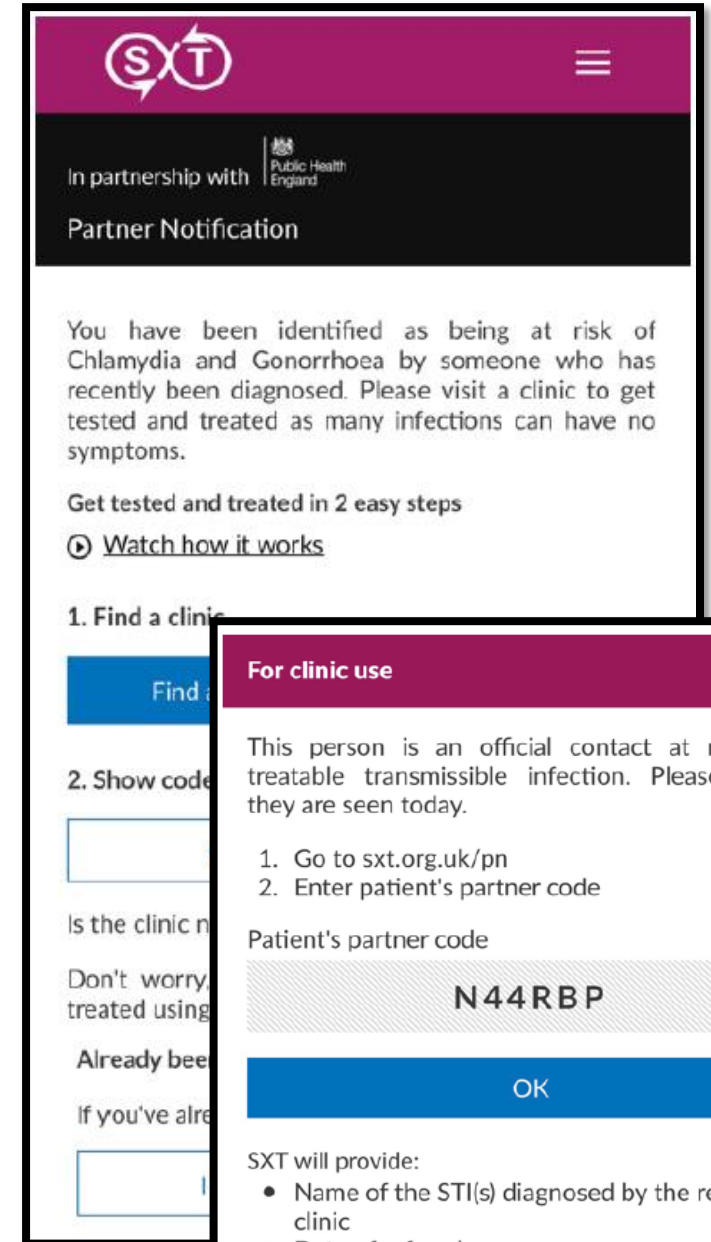
Send the Patient partner self-notification



Patient can complete partner notification away from the clinic



SXT notifies partners



The screenshot shows the SXT Partner Notification app interface. At the top, there is a purple header with the SXT logo and a menu icon. Below the header, it says "In partnership with Public Health England" and "Partner Notification". The main content area contains a message: "You have been identified as being at risk of Chlamydia and Gonorrhoea by someone who has recently been diagnosed. Please visit a clinic to get tested and treated as many infections can have no symptoms." Below this, it says "Get tested and treated in 2 easy steps" and provides a link to "Watch how it works". The first step is "1. Find a clinic", with a "Find a clinic" button. The second step is "2. Show code", with a text input field. Below the input field, it asks "Is the clinic notified?" and "Don't worry, you can be tested and treated using the code". There is a "Patient's partner code" field containing "N44RBP" and an "OK" button. At the bottom, it says "SXT will provide:" followed by a list of information: "Name of the STI(s) diagnosed by the referring clinic", "Date of referral", and "Confirmation to the referring clinic that this partner has been seen".

### For clinic use

This person is an official contact at risk of a treatable transmissible infection. Please ensure they are seen today.

1. Go to [sxt.org.uk/pn](http://sxt.org.uk/pn)
2. Enter patient's partner code

Patient's partner code

N44RBP

OK

SXT will provide:

- Name of the STI(s) diagnosed by the referring clinic
- Date of referral
- Confirmation to the referring clinic that this partner has been seen

# Aims

- To assess effectiveness of an online partner notification tool
  - Number of contacts tested per index case Vs. national data
- To examine factors associated with successful partner notification

# Method

- PN initiated in the UK Dec 2017 – July 2018
- Anonymised data on index case:
  - Demographics
  - STIs
  - PN
- Number of contacts screened per index case compared to national PHE data
- Factors associated with testing at least one partner examined using multivariable logistic regression
- Analyses were performed using STATA 12



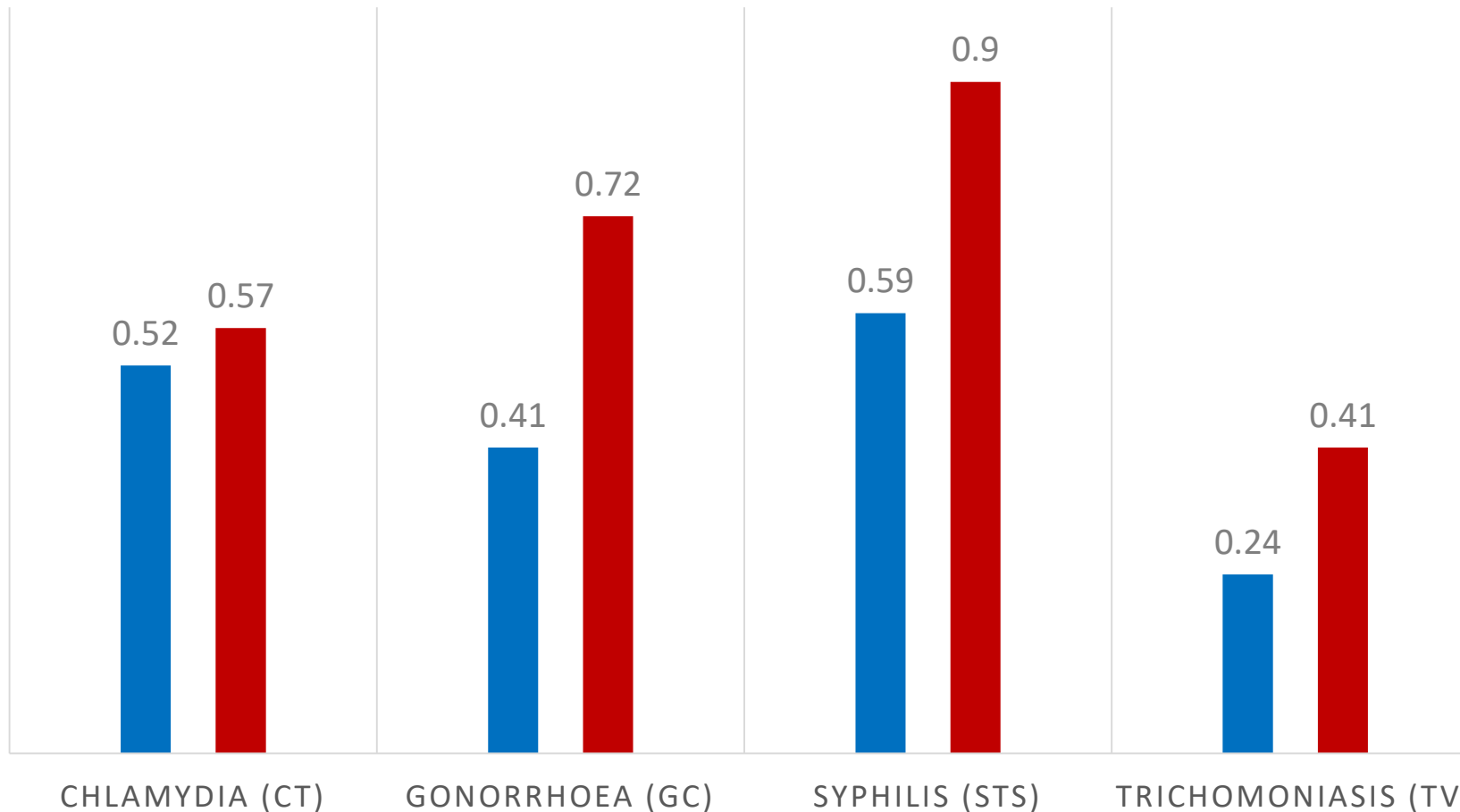
# Results

- 6414 index cases initiated PN via online PN tool
  - Median age 25 years (IQR 21-32)
  - 66% white ethnicity
  - 58% male
  - 26% men who have sex with men (MSM)
- 6779 STIs
  - Range 1-4 STIs per index case
  - Chlamydia (CT) 65%, gonorrhoea (GC) 21%, syphilis (STS) 5% and trichomonas vaginalis (TV) 4%
- 1,589 (24.8%) via online sexual health services
- 4282 (66.7%) within large urban clinics
- 23-34% of PN was self-verified online by the partners

# Results

## PARTNER NOTIFICATION RATIOS IN UK NATIONAL DATA VS. ONLINE PN TOOL (SXT)

■ PHE ■ SXT



PHE: Public Health  
England, UK

\*Data is from 2017  
national reported data  
based on coding of  
individuals who present  
as partners of infection

		Unadjusted OR	p-value	Adjusted OR	p-value
Ethnicity	White	1		1	
	<b>Black African</b>	0.79 (0.63, 1.00)	0.05	0.75 (0.58, 0.96)	0.02
	<b>Black Caribbean</b>	0.75 (0.60, 0.93)	0.008	0.70 (0.56, 0.89)	0.003
	<b>Black other</b>	0.96 (0.80, 1.21)	0.89	0.77 (0.61, 0.97)	0.028
	Asian	1.46 (1.11, 1.90)	0.006	1.25 (0.94, 1.66)	0.13
	Other	1.05 (0.83, 1.33)	0.65	0.91 (0.71, 1.17)	0.46
Gender	Female	1			
	<b>Male</b>	1.15 (1.03, 1.28)	0.01	0.74 (0.61, 0.90)	0.003
	Transgender	0.72 (0.18, 2.78)	0.63	0.84 (0.57, 1.23)	0.37
	Other	0.63 (0.17, 2.37)	0.49	0.56 (0.27, 1.18)	0.13
Location	Large conurbations	1			
	<b>Elsewhere</b>	0.57 (0.47, 0.69)	<0.001	0.47 (0.37, 0.59)	<0.001
	<b>Online</b>	0.40 (0.35, 0.46)	<0.001	0.30 (0.26, 0.35)	<0.001
STI	Chlamydia	1		1	
	Gonorrhoea	1.24 (1.09, 1.41)	0.002	0.92 (0.77, 1.11)	0.40
	Syphilis	1.35 (1.06, 1.71)	0.01	1.06 (0.78, 1.42)	0.72
	<b>Trichomonas</b>	0.91 (0.69, 1.19)	0.49	0.57 (0.40, 0.81)	0.002
	<b>NGU</b>	0.33 (0.19, 0.57)	<0.001	0.16 (0.08, 0.31)	<0.001
	<b>PID/epididymitis</b>	0.22 (0.08, 0.64)	0.002	0.13 (0.04, 0.43)	0.001
	HIV	1.06 (0.60, 1.86)	0.84	0.89 (0.44, 1.81)	0.75
	Other	1.17 (0.74, 1.85)	0.51	0.70 (0.41, 1.20)	0.20

Table 1. Associations with having  $\geq 1$  verified tested partner

OR: odds ratio

PID: pelvic inflammatory disease

NGU: Non-gonococcal urethritis



# Conclusions

- Online PN tool demonstrated increased PN compared to national data for CT, GC, STS and TV
- Reduced workload and cost
- Successful in large conurbations
- Being male, of black ethnicity or having a diagnosis of TV was associated with fewer partners tested

# Discussion

- Limitations
  - Individuals using the online tool may not be representative of the comparator group
  - Inability to link partners with subsequent STI results
- Strengths
  - Large sample size
  - Routine use of the online tool within the provider services
- Online PN provides a cost efficient strategy for effective PN
- Highlights groups to focus PN strategies in the future

# Acknowledgements

## *Participating providers included:*

- Brighton SHAC
- Brook
  - Brixton, Dudley, Euston, Milton Keynes, Sandwell
- Burrell St Sexual Health Clinic
- Harrison Wing
- Hathersage Sexual and Reproductive Health Clinic
- Jefferiss Wing
- Kent Online Testing
- North and North East Lincolnshire Sexual Health
- North Manchester Sexual Health Clinic
- Salisbury Department of Sexual Health
- SH24
- SHAC Central
- SHAC East
- Streatham Hill Clinic
- Walworth Clinic
- West Kent Integrated Sexual Health