#### Oral presentations

microscopy, nucleic acid amplification tests (NAAT) and culture. The NAAT test used was Gen-Probe APTIMA Combo 2, confirmed by the Aptima GC mono-assay.

**Results** 152 cases were identified; 63% of cases were in men, 75% were heterosexual. The median age was 25 years (IQR 20–33.5). 24% had previously had gonorrhoea, 29% had concurrent sexually transmitted infections and 5% had HIV co-infection. 88% of patients received correct treatment as per British Association for Sexual Health and HIV guidelines. 76% were offered TOC; of these, 43% attended for TOC. TOC was negative in all patients tested (NAAT and/or culture). 4% of patients attending TOC were retreated because of re-infection risk. 22% (82/369) of partners were tested and treated for gonorrhoea; however, written or official verification of this was limited.

**Discussion** Our data show that a high proportion, though not all, of patients are offered correct treatment at our centre, but only 43% return for TOC. Of those who return, persistent infection, to date, has not been detected at our centre. This may indicate that guidelines can be refined to direct TOC towards populations at greater risk of persistent or resistant gonorrhoea infection. More data regarding the best time to offer TOC is also required, as earlier TOC may improve uptake.

04

#### PHARYNGEAL GONORRHOEA: ASSESSING TREATMENT RESPONSES IN AN ERA OF UNCERTAINTY

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**Background** The last decade has seen a paradigm shift in diagnosis and treatment of gonorrhoea (GC). Recent guidelines are hampered by lack of evidence for optimal timing for test of cure (TOC) and method of testing. The majority of pharyngeal GC (pGC) is seen in MSM and is culture-negative. Traditionally infection is harder to eradicate at this site and TOC is now routinely recommended.

**Aim** To assess treatment responses and TOC strategy for pGC over a 2-year period that included multiple changes in practice.

**Methods** Retrospective case note review of all pGC diagnosed by Aptima Combo 2 (AC2) and confirmed with Aptima GC from January 2010 to January 2012 at two urban UK GUM clinics. Treatment regimens changed from oral to parenteral and TOCs performed at 2 or 3 weeks across the study period.

**Results** A total of 523 cases of pGC were diagnosed; 514 (98.3%) were in men. Of the 343 where culture was taken concurrently, 63 (18.4%) were culture positive. Ciprofloxacin resistance was present in 33% of pGC isolates but none showed cefixime resistance. Of the 476 where pGC treatment was given and documented by us, most were treated with either cefixime 400 mg PO (51.3%) or ceftriaxone 500 mg IMI (40.1%), usually with azithromycin 1 g PO or doxycycline 100 mg bd ¡Ý7 days PO. Of the 386 that underwent TOC within 90 days of treatment, most had both culture and AC2 taken. Positive TOC was seen in 14 (3.6%) patients (only five were culture-positive); all had received cefixime-based regimens as their first line GC treatment. High rates of ongoing sexual risk clouded the determination of treatment failure. The majority of TOCs done at 2 weeks (31/32; 97%) or 3 weeks (43/44; 98%) were AC2-negative. Two AC2-positive TOCs at 7 and 8 days post-treatment, respectively, were difficult to interpret (see abstract O4 table 1).

**Conclusions** Our data support the new guidelines for pGC treatment with ceftriaxone 500 mg regimens followed by TOC at 2 weeks with a molecular test. Prospective studies and ongoing surveillance are needed to monitor the efficacy of this strategy.

#### Abstract 04 Table 1

Antibiotic regimen used for pharyngeal GC treatment	No. of patients with TOC	No. with negative TOC result (%)		
Cefixime 400 mg + AZI 1 g	161			
Cefixime 400 mg + doxy ≥7 days	10	5 (50%)		
Ceftriaxone 500 mg + AZI 1 g	101	101 (100%)		
Ceftriaxone 500 mg + doxy ≥7 days	16	16 (100%)		
Ceftriaxone 500 mg only	9	9 (100%)		
Ceftriaxone 250 mg + AZI 1 g	3	3 (100%)		
Ceftriaxone 250 mg + doxy ≥7 days	2	2 (100%)		
Ceftriaxone 250 mg only	5	5 (100%)		
Azithromycin 2 g only	9	9 (100%)		
Ciprofloxacin 500 mg + AZI 1 g	6	6 (100%)		

AZI, azithromycin; doxy, doxycycline 100 mg bd; TOC, test of cure.

05

## PARTNER NOTIFICATION FOR GONORRHOEA: ANALYSIS OF OUTCOMES USING SURVEILLANCE DATA

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**Background** Partner notification (PN) is an essential component of STI control but can be difficult where index cases have multiple casual partners. Guidelines recommend that for gonorrhoea, a minimum of 0.4 contacts/case in large conurbations, and 0.6 contacts/case elsewhere, should be screened. We investigated the effectiveness of newly introduced surveillance codes for monitoring standards of PN in England.

**Objectives** To investigate the relationship between PN ratios for gonorrhoea and patient socio-demographic characteristics.

**Methods** Data on PN from the Genitourinary Medicine Clinic Activity Dataset (GUMCAD) were analysed.

Results Reporting on PN began on a rolling basis in 207 GUM clinics during 2011. Provisional data on PN were available from 171 clinics reporting data covering 951 clinic months in total, during which there were 7423 cases and 2749 contacts. In this period, the overall PN ratio for gonorrhoea was 0.37 contacts/case. PN ratios were highest for clinics in non-urban areas (0.42 vs 0.36 in urban areas) but there was no difference between PN ratios in London and the rest of England. PN was most successful for female partners of heterosexual male index cases (0.44 contacts/case). Of those attending as a contact 26% (707/2749) tested positive for gonorrhoea; 31% of females, 22% of heterosexual males and 24% of MSM. **Conclusions** Provisional data suggest that, on average, contact to index case ratios for gonorrhoea are below recommended standards but these are likely to vary considerably by clinic. The high prevalence of gonorrhoea among contacts emphasises the importance of PN for case finding and reducing transmission. Further analysis to better understand the strengths and limitations of these data is warranted.

06

## SENIORITY IMPROVES SPECIFICITY: DIFFERENCES IN PID DIAGNOSIS BETWEEN DIFFERENT GRADES OF CLINICIAN

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**Background** Pelvic inflammatory disease is difficult to diagnose; dependent on interpretation of clinical symptoms and signs that lack sensitivity and specificity. Differences in the rates of PID diagnoses have been noted among senior sexual health physicians. Given the potential severe consequences of untreated PID, we

Abstract 06 Table 1 Rates of chlamydia and gonorrhoea infections in relation to practitioner group

Grade of staff	Band six nurses	FY1	ST2	GP	SAS	Registrar	Consultant	Whole cohort
No of staff	7	6	4	2	1	9	6	41
No of consultations	442	140	207	252	486	996	930	3453
No of PID diagnoses	17	8	9	14	21	50	47	166
% Of cohort diagnosed with PID	3.8	5.7	4.3	5.6	4.3	5	5.1	4.8
Chlamydia prevalence (%)	10.1	9.3	6.3	12.3	8.6	10.9	11.4	10.4
Gonorrhoea prevalence (%)	2	0.7	1.4	3.6	1.6	2.7	3.1	2.5
% Of PID patients chlamydia positive	5.9	12.5	11.1	28.5	23.8	24	31.9	23.5
% Of PID patients gonorrhoea positive	5.9	0	0	28.5	0	12	6.4	8.4
% Chlamydia positive patients diagnosed with PID	2.2	7.7	7.7	12.9	11.9	11	14.2	10.9

hypothesised that clinicians with less training and experience may tend to err on the side of caution and be more likely to diagnose PID than more senior colleagues.

**Objectives** To ascertain whether the rates of PID diagnoses differ by grade of clinician.

**Methods** Women attending our service as new or rebook patients between March 2009 and January 2010 were seen by eight different grades of clinician. Of these, all but Band five nurses saw symptomatic patients. Data were analysed by grade of staff conducting the consultation.

**Results** Chlamydia (CT) prevalence was broadly similar across all staff groups. The rates of PID diagnoses were also similar. However, the proportion of PID patients with CT differed significantly between staff groups. In the cases of PID diagnosed by more experienced staff, CT was found in 24% to 32% of patients. This is broadly consistent with the current understanding of PID aetiology. PID diagnosed by nurses and more junior doctors was less likely to have a confirmed STI aetiology. The rate ratio of diagnosis of CT positive to CT negative PID by consultants vs Band six nurses is 5.43 (95% CI 0.77 to 38.01) p=0.089 The rate ratio of diagnosis of CT positive to CT negative PID by experienced doctors (GP, SAS, Registrar, Consultant) vs nurses, FY1 and ST2 doctors is 3.09 (95% CI 1.01 to 9.43) p=0.048 (see abstract O6 table 1).

**Conclusions** Significant differences were found in the proportion of patients with chlamydia positive PID between experienced doctors and other clinicians. The broader experience of senior doctors may help them in differentiating PID from other causes of lower abdominal pain thus improving the specificity of their diagnosis.

# Session title: Testing, service delivery and maintaining good practice

Session date: Wednesday 27 June 2012; 1.45 pm—3.15 pm



THE DIAGNOSIS AND TREATMENT OF CHLAMYDIA AND GONORRHOEA IN GENERAL PRACTICE IN ENGLAND: ANALYSIS OF ELECTRONIC HEALTH RECORDS AND SURVEILLANCE DATA

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**Background** Primary care has become increasingly important in STI management in England but data on diagnosis and treatment in this setting are not routinely analysed.

**Aims** To investigate and assess the diagnosis and treatment of bacterial STIs in general practice (GP).

**Methods** We calculated age and gender standardised estimates of the incidence of diagnoses of chlamydia and gonorrhoea in GP using data from the GP Research Database and national population

statistics for the years 2003—2008. Since diagnoses made and treated elsewhere can be recorded in primary care notes, we estimated cases treated in primary care using an algorithm to identify appropriate prescriptions within defined window periods, accounting for other possible treatment indications. We estimated the proportion of all cases reported in England which were treated in GP, relative to other providers of sexual health services.

**Results** An estimated 21 423 diagnoses of chlamydia (42.3/100 000 registered population) and 1494 diagnoses of gonorrhoea (2.96/100 000) were made in GP in England/annum between 2003 and 2008. 35% of chlamydia diagnoses were in those over 25 years. 70% of chlamydia and 36% of gonorrhoea diagnoses recorded in GP were treated, comprising respectively 12% and 3% of all cases diagnosed in England. Doxycycline and azithromycin were most commonly prescribed drugs for chlamydia. Despite revision of gonorrhoea treatment guidelines in 2005, quinolones remained most commonly prescribed for gonorrhoea (42% in 2006–2008), although the proportion treated with cephalosporins rose gradually over the study period (29% in 2006–2008). The algorithm identified 12% and 30% more treated cases of chlamydia and gonorrhoea compared with including same-day prescriptions only.

**Conclusions** General practice makes an important contribution to the diagnosis and treatment of bacterial STIs. Efforts to ensure GPs are aware of and use recommended treatment guidelines are needed.

08

THE AUSTRALIAN CHLAMYDIA CONTROL
EFFECTIVENESS PILOT (ACCEPT): FIRST RESULTS FROM
A RANDOMISED TRIAL OF ANNUAL CHLAMYDIA
SCREENING IN GENERAL PRACTICE

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**Background** ACCEPt is a cluster randomised controlled trial to evaluate annual opportunistic chlamydia screening for 16–29-year-old men and women in general practice (GP).

 $\begin{tabular}{ll} \textbf{Objective} & To \ report \ enrolment \ and \ baseline \ results. \end{tabular}$ 

**Methods** The unit of randomisation is a town; all GP clinics are enrolled and towns are randomised using a minimisation design. In intervention towns a multifaceted approach to increase chlamydia testing includes: an education package, a computer prompt; incentive payments; a recall system for annual testing; partner notification; and regular feedback on testing rates. The intervention will be in place for up to 4 years. Control towns will continue usual practice. The primary outcome is change in chlamydia prevalence estimated from samples of 80–100 consecutive GP patients in each town (total 4000) at the beginning and end of the trial.

**Results** From July 2010 to December 2011, we enrolled 603 GPs from 154 clinics (clinic response rate >80%) in 52 geographically