Abstract O5-S1.06 Table 1 Agreement between computer-assisted self-interview (CASI) and clinician documentation (Clin) for key clinical and behavioural variables (N=875)

Variable	κ (95% CI)	CASI+, Clin+ (%)	CASI+, Clin− (%)	CASI−, Clin+ (%)	CASI−, Clin− (%)
Reasons for exclusion from express care*					
Symptoms of STD	0.67 (0.63 to 0.72)	436 (50)	118 (13)	23 (3)	298 (34)
Known contact to HIV/STD	0.60 (0.52 to 0.67)	91 (10)	72 (8)	23 (3)	689 (79)
Symptomatic sex partner	0.15 (0.05 to 0.26)	8 (1)	62 (7)	10 (1)	795 (91)
Positive STD test, needs treatment	0.12 (−0.03 to 0.27)	2 (0)	28 (3)	0 (0)	845 (97)
Syphilis in past year	0.40 (0.23 to 0.72)	6 (1)	13 (1)	0 (0)	856 (98)
Vaccine indication†	0.25 (0.20 to 0.31)	71 (8)	249 (28)	5 (1)	550 (63)
Interested in Plan B‡	0.13 (−0.04 to 0.30)	3 (1)	4 (2)	25 (11)	202 (86)
Interested in contraception‡	0.32 (0.16 to 0.48)	15 (6)	20 (9)	20 (9)	166 (71)
Sensitive behaviours					
Male sex partner (lifetime), among men	0.93 (0.90 to 0.96)	285 (45)	13 (2)	10 (2)	332 (52)
Injection drug use	0.82 (0.80 to 0.94)	43 (5)	7 (0)	5 (0)	820 (94)
Methamphetamine use	0.71 (0.63 to 0.79)	68 (8)	38 (4)	10 (1)	759 (87)
Unprotected anal intercourse with partners of discordant or unknown HIV status, among MSM§	0.58 (0.48 to 0.68)	63 (22)	35 (12)	17 (6)	170 (59)
Transactional sex‡	0.67 (0.50 to 0.84)	15 (6)	5 (2)	8 (3)	206 (88)

*Some reasons for exclusion not included here due to lack of comparative data in clinician documentation.
†Clin+=documented administration or patient declination of HAV, HBV or HPV vaccine.
‡Limited to female patients; Clin+= dispensation of Plan B (for Plan B variable) or discussion of contraception plan (for contraception variable).
§Limited to CASI+, Clin+ MSM.

Health services and policy oral session 2—Evaluation of services and policies

O5-S2.01 A NATIONAL PROGRAM WITH A NATIONAL IMPACT: QUADRIVALENT HPV VACCINATION AND GENITAL WARTS IN AUSTRALIA, 2004–2010

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Background From mid-2007 Australia funded a universal free vaccination program for all females between 12 and 26 years, but not for men or for women who were older than 26 years in 2007. Vaccine coverage rates of >80% were achieved for school-girls, though coverage was probably lower for young women in the community. To determine the population effect of the vaccine program we established a national surveillance network to measure trends in clinical presentations for genital warts.

Methods Eight sexual health services dispersed around Australia provided data on all new patients between 2004 and 2010, including new diagnoses of genital warts, demographics, sexual behaviour, and HPV vaccination status.

Results Among more than 130 000 new patients we identified over 10 000 new cases of genital warts. Before the vaccination program there was no change in the proportion of women or heterosexual men diagnosed with genital warts. In the first 30 months of the vaccination program we detected a 59% decline in the proportion of young resident women diagnosed with genital warts (p-trend <0.0001) and preliminary analysis indicates that this trend was ongoing in 2010. In contrast, we could not detect any significant decline in genital warts among non-resident young women, older women, or men who have sex with men. Interestingly, the proportion of younger men (<26 years in mid-2007) diagnosed with genital warts declined by 39% (p-trend <0.0001) while there was no significant decline among older heterosexual men. By 2009, 65% of resident women of free vaccine-eligible age, 15% of non-resident women of the same age, and 11% of older women reported having had a quadrivalent or an unknown HPV vaccine.

Conclusion The vaccination program has had a large population-level impact on the incidence of genital warts in young Australian women, with some flow-on benefit for young heterosexual men as a result of herd immunity.

O5-S2.02 DELAY OF ENTRY INTO CARE IN HIV POSITIVE INDIVIDUALS

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Background Delay between HIV diagnosis and entry into care may impact not only on the individual prognosis, but hinders interruption of further HIV transmission. Insight into duration and determinants of care-delay and differences between those who do and do not delay are important to further public health policy aimed at reducing ongoing HIV transmission.

Methods (1). Data from the ATHENA national observational cohort for HIV patients with a first date of care from January 2008 until May 2010 were analysed to assess place, date of initial positive diagnosis and entry date into care. (2). Prospective data collection is set up regionally from consenting patients testing HIV positive at the STI clinics in Amsterdam and Rotterdam. Results from February 2009 until April 2010 for time into care and delay are presented. For this analysis delay of entry into care is defined as a time period of 4 weeks or more between confirmed HIV diagnosis and first consultation at the HIV treatment centre.

Results (1). At the national level, 28% of all new patients entering care (n=2775) was diagnosed HIV positive at their GP, 25% at an STI clinic, 23% in the hospital, 2% at the pregnancy screening, 4% abroad, 4% other and 14% unknown. Median number of days between HIV diagnosis and entry into care was 19 days (IQR

7–49 days). In 16% of patients time to enter care took over 150 days; those infected by heterosexual contact or injecting drug use were more likely to be in this group. Patients born outside the Netherlands were also more likely to enter care late. 2). From February 2009 until April 2010, 120 participants were included in the study (response 70%). The majority (n=108) were men who have sex with men (MSM). For 78% of participants a date of entry into care was known; median time into care was 8 days (range 0–104 days). Twenty two per cent had not entered care yet of whom 16% had CD4 cell counts below 350. Of participants who were directly referred to an HIV treatment 10% delayed for medical care compared to 45% of participants wanted to make an appointment on their own initiative.

Conclusions Specific subpopulations such as heterosexuals and ethnic minorities are at risk for entering care late after being diagnosed HIV positive. Results from the prospective study show that direct referral from STI clinic to an HIV treatment centre leads to less delay. Testing of those at risk is not enough to interrupt HIV transmission chains, entry into care needs to be assured as well.

O5-S2.03 EFFECT OF IMPROVING THE STI SERVICES IN SEVEN PROVINCES OF CHINA

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Background The STI services can reduce HIV transmission and have been the important component of HIV control programmes. In China, the STI services remain weak. Under the framework of AIDS control programme of the Global Funds Round 4, we conducted the sub-programme to improve STI services in 21 counties of 7 provinces in China from 2007 to 2009, including one-week training workshops for all STI care providers, two-month field training for key STI clinicians at STD Clinic of National Center for STD Control, STI drug assurance, and quality services offering for STI patients. Annually the effect of STI services was assessed according to the guideline of WHO/UNAIDS in the 21 counties.

Methods The assessment of STI services was through health facility survey, including three indicators: (1)STI service indicator 1 (SI1) is defined as the per cent of patients with STIs at observed health care facilities who are appropriately diagnosed and treated according to the national guidelines on STI treatment in China; (2) STI service indicator 2 (SI2) is defined as the per cent of patients with STIs who are given advice on condom use and partner notification and referral for HIV testing in term of national standards; (3)Standardised STI service indicator (SSI) means the comprehensive case management including SI1 and SI2. The sample size of STI patients between provider and client interactions observed was 40 per county according to the recommendation of national experts. Data were collected in observations of provider-client interaction at the health-care facilities offering STI services by trained professionals. The software of EpiData3.1 and SPSS 11.5 was used to data entry and analysis.

Results From 2007 to 2009, the SI1 was 46.16% (397/860) (95% CI 42.83% to 49.49%), 62.94% (603/958) (95% CI 59.88% to 66.00%), 81.96% (686/837) (95%CI 79.35% to 84.57%) on average in 21 counties, respectively, and there was significantly increased trends (χ^2 is 234.30, p=0.000); the SI2 was 28.32% (243/858) (95%CI 25.31% to 31.33%), 45.04% (431/957) (95% CI 41.89% to 48.19%), 80.33% (678/844) (95% CI 77.65% to 83.01%) on average for these counties, respectively, and there was also significantly increased trends (χ^2 is 459.37, p=0.000). For overall STI service quality, SSI was 20.98% (180/858) (95% CI 18.26% to 23.70%), 40.02% (383/957) (95% CI 36.92% to 43.12%), 67.26% (563/837) (95% CI 64.08% to 70.44%), respectively in 2007–2009, and there was significantly increased trends (χ^2 is 370.81, p=0.000). The STI service indicators in rich areas were higher than in poor counties.

Conclusions The quality of STI services was significantly improved through the Global Funds Round 4 in 21 counties of seven provinces in China, and should be scaled up to other areas in the country.

O5-S2.04 EVALUATION OF SEXUALLY TRANSMITTED INFECTION CLINICAL SERVICES IN GAUTENG PROVINCE, SOUTH AFRICA: KNOWLEDGE, ATTITUDES, AND BELIEFS AMONG HEALTH CARE PROVIDERS

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Background The STI clinical encounter is an opportunity to identify and prevent new HIV as well as STI infections. We sought to evaluate the STI clinical encounter among public and private clinicians in South Africa to determine opportunities for improved prevention services.

Methods From November 2008 to March 2009, we studied the knowledge, beliefs, and attitudes of STI health care providers in rural and urban facilities in Gauteng Province. We selected public and private health facilities reporting >100 patients annually, stratifying among 6 municipalities. We interviewed managers from eligible clinics and all eligible staff to participate in self-administered, computer-assisted surveys. We used STATA 9 for univariate, stratified analysis by χ^2 and Fisher's exact test.

Results Of 641 eligible clinicians, 613 (96%) completed the survey, including 100% of public and 65% of private providers. Most clinicians were nurses (91%), female (89%), from public clinics (92%), and had formal STI (87%) or HIV (96%) training within 10 years. The median number of STI patients seen daily was 6 and most providers were experienced in STI care (median 9.5 years), although more so in private clinics (11.7 years). Most clinicians recognised most of the common syndromes and correctly identified treatment options, particularly for bacterial genital ulcer syndrome. Most (94%) understood genital herpes recurs, but only 85% agreed herpes could be treated. Nonetheless, misperceptions were common: less than half (48%) agreed with the statement that some STIs cannot be cured with medication," only 5% disagreed that "herpes is curable," 34% agreed "untreated STIs develop into AIDS," and 33% agreed that "HIV medications were more dangerous than having AIDS." STI or HIV training was either unrelated or inversely related to these misperceptions. While most providers (95%) felt offering HIV testing to STI patients was one of their most important responsibilities, many (27%) believed it permissible to test patients for HIV without consent. Clinicians reporting having STI or HIV training were more likely to agree with HIV testing without consent (30% vs 17%, p=0.001) see Abstract O5-S2.04 table 1.

Conclusions Most clinicians understood STI syndromic treatment, however many misunderstood important aspects of HIV/STI clinical care and their implications for prevention. Brief refresher courses on specific aspects of treatment and prevention may benefit HIV/STI clinical care and prevention in Gauteng.