

emerging paradigm within primary care to focus not only on disease (pathogenesis) but also on health (salutogenesis) might open new avenues for sexual health counselling. New technology also has potential: continuous education sessions have limited impact on prescribing habits for infrequent conditions with fast changing resistance patterns like gonococcal infections; learning GP to use more and better their electronic prescription expert-system based on patient ICPC code (Prescriptor) is a better option and now available in most GP operating systems in the Netherlands.

P5-S6.28 HIV PREVENTION BASED ON THE STATIC MODES OF TRANSMISSION SYNTHESIS FOR TWO INDIAN DISTRICTS: INSIGHTS FROM DYNAMICAL MODELLING

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Background The Modes of Transmission (MOT) synthesis uses a static HIV transmission model to predict distribution of incident infections along subgroups over 1 year, and directs HIV prevention along this distribution. Because the MOT does not consider where sustained transmission is most likely to occur, and does not use parameter combinations fitted to observed epidemic characteristics, its relevance for planning interventions may be limited.

Methods We fitted a dynamical HIV/STI heterosexual transmission model to districts Mysore and Belgaum, India. The MOT and dynamical models estimated the proportion of new HIV infections over 1 year due to transmission between female sex workers/clients, their non-commercial partnerships, and low-risk partnerships. We compared predictions from the dynamical model to MOT results using prior and posterior (fitted) parameters. Intervention impact was illustrated using the dynamical model.

Results Using prior inputs, the MOT predicted that commercial sex accounted for 66.2–70.6% of incident infections among males, whereas 71.7–74.2% of incident infections among females were due to bridging infections from clients. There was less variability in MOT results when fitted inputs were used. The majority of the remaining new infections in males and females were due to transmission within low-risk partnerships. In contrast, the dynamical model predicted a higher contribution of commercial sex among males (90.7–91.2%), a higher contribution of bridging infections among females (70.5–86.9%), and that <1.5% of infections were due to low-risk partnerships. Dynamical modelling predicted that any intervention that reduces transmission by 20% applied among commercial sex partnerships could decrease overall HIV incidence by 12% in the first year and by 21% in 5 years see Abstract P5-S6.28 table 1. Applying this intervention among non-commercial

partnerships of clients reduces overall incidence by 9% in years 1 through 5 because clients continue to become infected from their commercial partnerships.

Conclusion Prior inputs for the MOT will not reflect observed HIV prevalence, and as a result, will produce greater variability in MOT predictions. Allocating resources along a 1-year distribution of incident infections can prioritise prevention to the wrong subgroups because they do not account for the dynamic effects of interventions. Improved methods of epidemic appraisals are urgently needed to guide prevention programming.

P5-S6.29 INTENSIVE USE OF A CLINICAL DOCUMENTATION AUDIT TOOL TO BRING ABOUT SUSTAINED IMPROVEMENT IN THE STANDARD OF RECORD-KEEPING IN A BUSY GENITO-URINARY MEDICINE (GUM) CLINIC

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Introduction Accuracy and consistency in clinical note-keeping is an essential element of clinical governance. In this busy GUM clinic, up to 12 different healthcare practitioners (both nurses and doctors) see patients for their history and examination, as well as taking tests, making microscopic diagnoses, giving treatment and notifying contacts. With this many staff of differing clinical backgrounds seeing patients autonomously, it is important that minimum standards of documentation are maintained. This study reports the use of an audit tool designed to provide clinic workers with regular feedback on their individual record-keeping performance compared to the clinic as a whole, thereby identifying areas where documentation standards can be improved.

Methods The audit was started in January 2009 and carried out monthly for 12 months with three sets of clinical notes audited per clinician each month. Collective scores for the clinic were issued on a monthly basis, with individual clinicians also receiving their own scores confidentially every quarter. The audit was discontinued for a year, then repeated so as to evaluate the extent to which improvements made in the first year had been maintained. Clinicians were unaware that the re-audit was taking place. The audit was based on 31 separate criteria divided into administrative (7 criteria), clinical (20 criteria) and health adviser (4 criteria) sections. This report focuses on the outcome of the clinical section, which included criteria such as adequacy of history and examination records, choice of tests conducted, consistency of diagnoses with findings, and suitability of treatments prescribed. The internal standard was set at 100% for each criterion.

Results Overall scores for individual clinicians in the first month ranged from 72% to 96%, with median 82% and mean 83%. At month 12, the range was 87–100%, median 98%, mean 97%. The

Abstract P5-S6.28 Table 1 Distribution of 1-year incident infections by type of partnership, as predicted by the MOT and a fitted dynamical model

Partnership type		Median % of incident infections attributable to partnership types (2.5 and 97.5 percentiles)					
		MOT (prior inputs)		MOT (posterior inputs)		Dynamical model	
		Mysore	Belgaum	Mysore	Belgaum	Mysore	Belgaum
Females	Commercial	6.5 (2.4, 14.9)	5.1 (1.9, 12.2)	7.0 (3.3, 13.0)	4.5 (2.0, 8.8)	28.4 (18.6, 35.5)	11.7 (5.7, 15.0)
	Main partnerships of FSWs/Clients	71.7 (50.4, 88.7)	74.2 (48.6, 90.9)	75.6 (61.0, 87.8)	73.0 (55.4, 84.9)	70.5 (63.6, 80.3)	86.9 (83.5, 92.9)
	Casual partnerships of FSWs/Clients	0.03 (0.01, 0.09)	0.01 (0.003, 0.04)	0.02 (0.01, 0.07)	0.01 (0.004, 0.04)	0.30 (0.25, 0.38)	0.31 (0.23, 0.38)
	Low-risk	20.0 (4.6, 40.7)	19.4 (4.3, 44.3)	15.8 (7.1, 29.3)	21.8 (10.9, 38.7)	0.76 (0.31, 1.1)	1.0 (0.61, 1.4)
Males	Commercial	70.6 (21.4, 92.6)	66.2 (14.3, 92.8)	66.0 (40.6, 81.1)	69.1 (41.7, 84.3)	91.2 (90.8, 95.6)	90.7 (88.4, 96.1)
	Main partnerships of FSWs/Clients	9.8 (3.4, 21.3)	10.8 (3.6, 20.9)	11.3 (6.1, 20.2)	9.6 (4.2, 19.5)	6.3 (3.4, 8.1)	7.3 (2.9, 9.2)
	Casual partnerships of FSWs/Clients	2.0 (0.5, 4.0)	4.5 (1.2, 9.9)	1.7 (0.66, 3.7)	3.8 (1.3, 8.3)	0.5 (0.3, 0.6)	0.87 (0.51, 1.2)
	Low-risk	15.6 (2.8, 58.5)	13.0 (1.6, 65.8)	19.7 (10.0, 36.9)	14.9 (6.0, 35.4)	0.6 (0.3, 0.9)	1.0 (0.37, 1.4)

FSW, female sex worker; MOT, Modes of Transmission.