



17TH ANNUAL CONFERENCE OF THE
BRITISH HIV ASSOCIATION (BHIVA)

British HIV Association
BHIVA

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6-8 April 2011, Bournemouth International Centre



**HIV positive patients diagnosed with
STIs on asymptomatic screening: the
risk to public health**

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Background

- ▶ Concomitant sexually transmitted infections (STIs) increase the risk of HIV transmission
- ▶ BHIVA guidelines indicate that all patients with HIV should be offered STI screening at least once annually

Quinn TC Int J STD AIDS. 1996;7 Suppl 2:17-24.

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Aim

- ▶ To determine characteristics of the HIV infected cohort testing positive for STIs on asymptomatic screening
- ▶ To assess the risk of HIV transmission based on ARV history and HIV viral load

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Methods

- ▶ Retrospective analysis of HIV +ve patients with STIs in 2010 (Jan – Dec)
- ▶ Data collected
 - ▶ Age
 - ▶ Ethnicity
 - ▶ CD4
 - ▶ Viral Load + ARVs
 - ▶ Acquisition of other STIs in 2010

Methods

- ▶ STIs : GC, CT, syphilis, Hep C
- ▶ Did not include warts, HSV, TV
- ▶ Same infection at >1 site was classified as a single infection
- ▶ Testing methods:
 - ▶ Serology : Syphilis, Hep C +/- RNA
 - ▶ GC CT TMA
 - ▶ SCTS/SCRS/SCVS/FVU

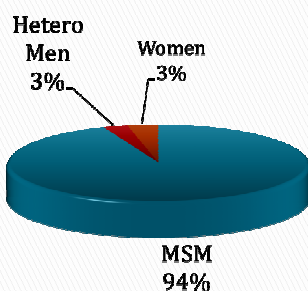
Results

- ▶ 1323 asymptomatic STI screens performed in outpatient HIV clinic

Sexual Orientation	No of asymptomatic screens	Percentage (%)
MSM	969	73
Hetero Men	132	10
Women	216	16
Unrecorded	6	1

- ▶ 165 infections in 149 patients diagnosed on asymptomatic screens

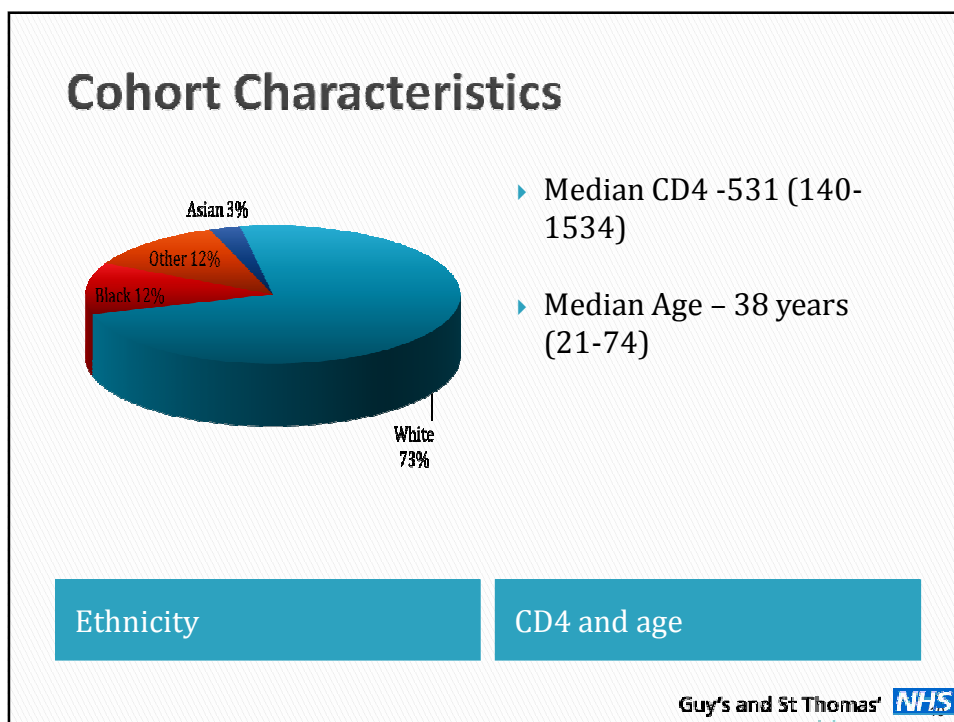
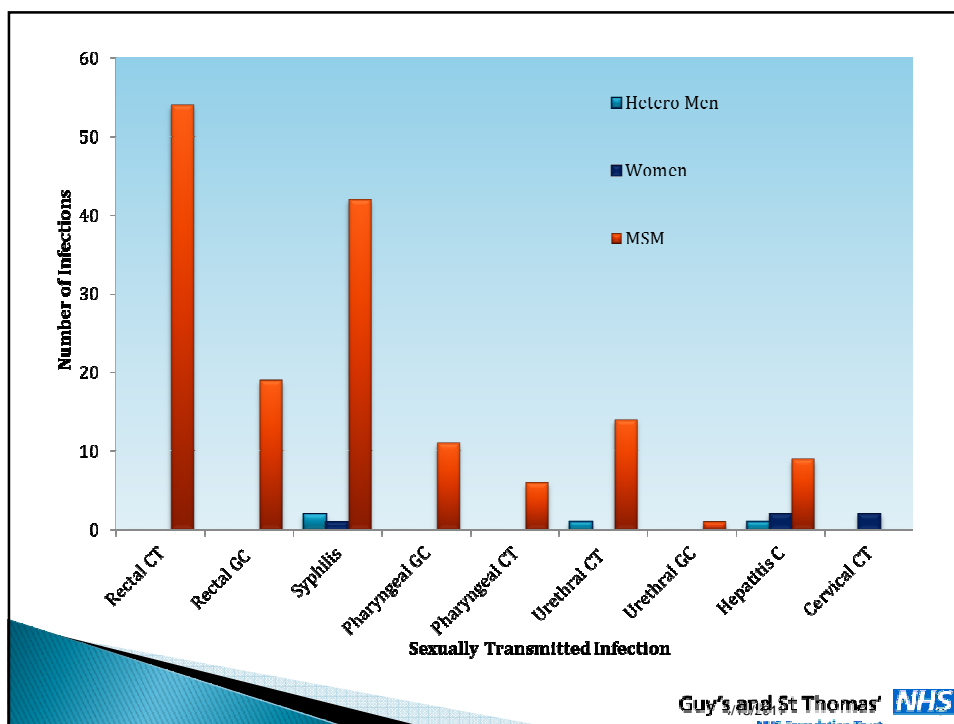
Positive results

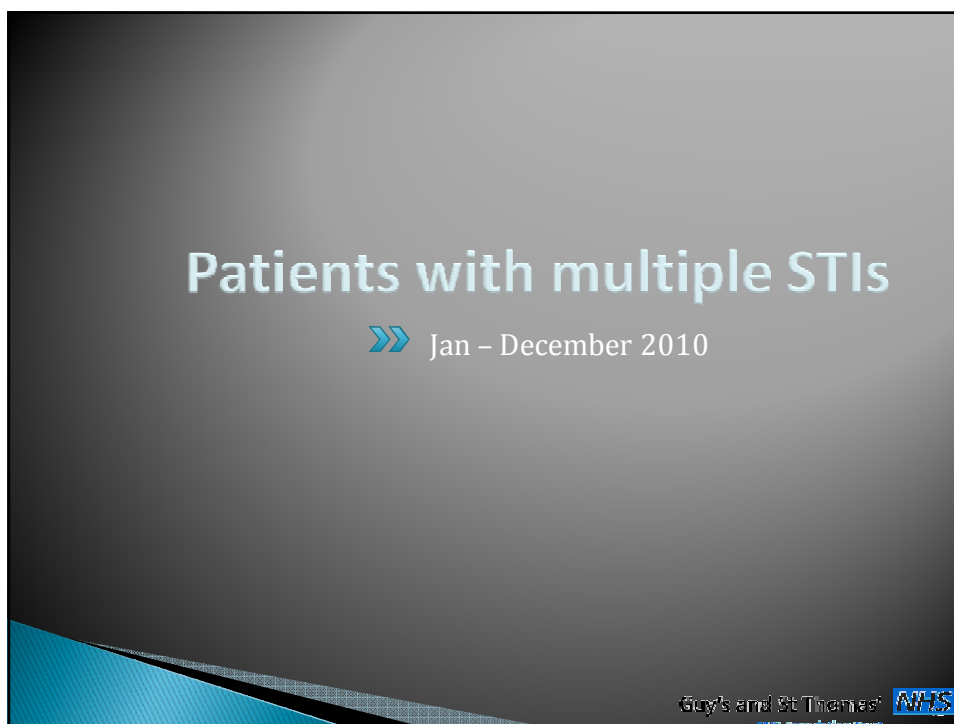
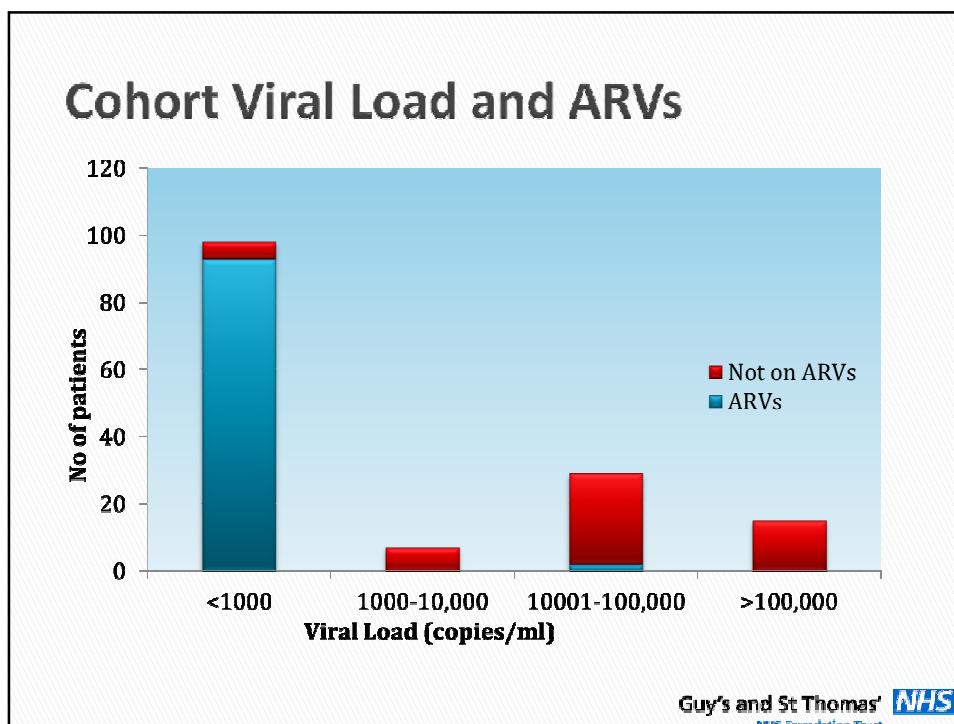


- ▶ 152/969 (15.6%) MSM screens resulted in an infection
- ▶ 5/216 (2.3%) screens done in women resulted in an infection
- ▶ 4/132 (3%) screens done in hetero men resulted in an infection

STIs by sexual orientation

Proportion Positive screens

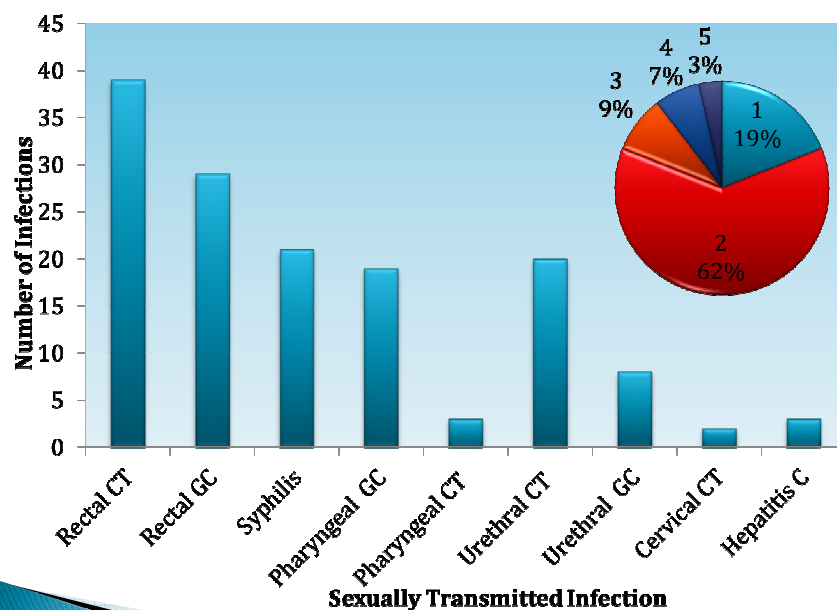




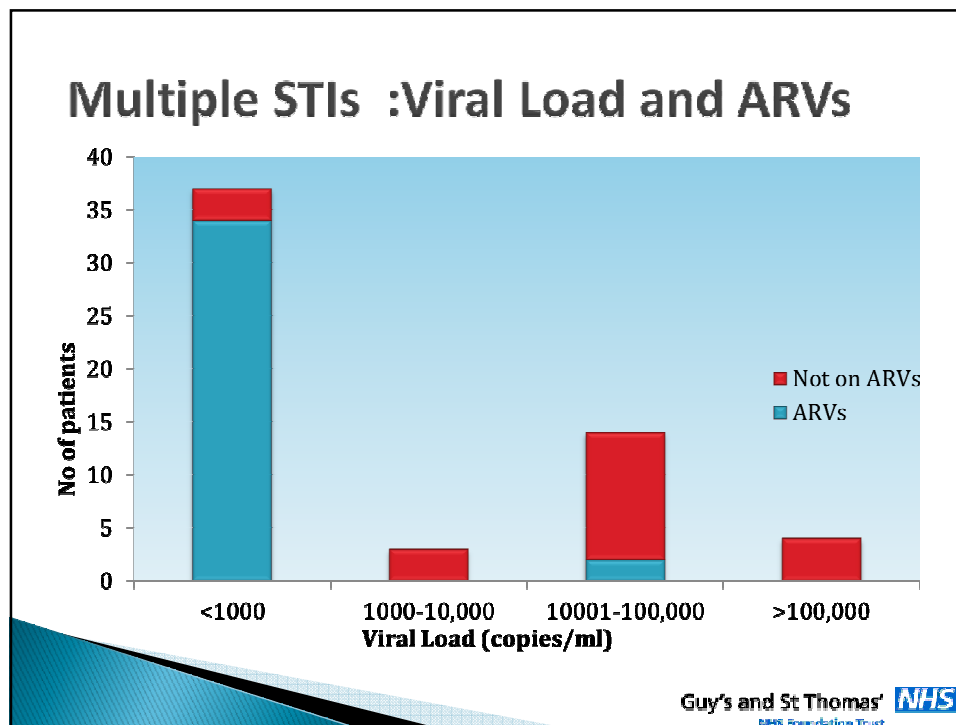
Multiple STIs characteristic

- ▶ 58/149 (39%) patients had STIs diagnosed on >1 occasion within the analysis period
- ▶ 57/58 (98%) were MSM
- ▶ 44/58 (76%) of white ethnicity, 8/58 (14%) black ethnicity
- ▶ Median CD4 was 533 (98-1350), median age was 36 years (21-59)
- ▶ 9/58 (16%) were Hep C co-infected

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Results

- ▶ Patients testing positive for STIs most likely to be white British MSM between 31-40 years, on ARVs with CD4 counts >350
- ▶ Rectal CT and syphilis most common infections on asymptomatic screening
- ▶ Rectal CT and rectal GC most common in patients with multiple infections
- ▶ Over a third of patients with multiple episodes of STIs had HIV viral loads >1000 copies/ml

Discussion

- ▶ High prevalence of STIs and high rate of recurrent infection within this cohort
- ▶ If having serodiscordant partners presence of rectal STIs may be facilitating HIV transmission
- ▶ Targeted ARV therapy may decrease HIV infection rates at a population level
- ▶ Risk reduction therapy has proven highly effective in some cases

Das M et al CROI 2011 Paper #33, # 1022
Fox, J et al HIV Med 2009 Aug ; 10(7):432-8

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Recommendations

- ▶ Evaluating HIV +ve MSM patients for ARVs if presenting with > 1 STI/year despite CD4 >350
- ▶ Guidelines changed from annual to quarterly testing for HIV +ve MSM
- ▶ Intensive risk reduction therapy
- ▶ Dedicated partner notification service for HIV outpatient setting

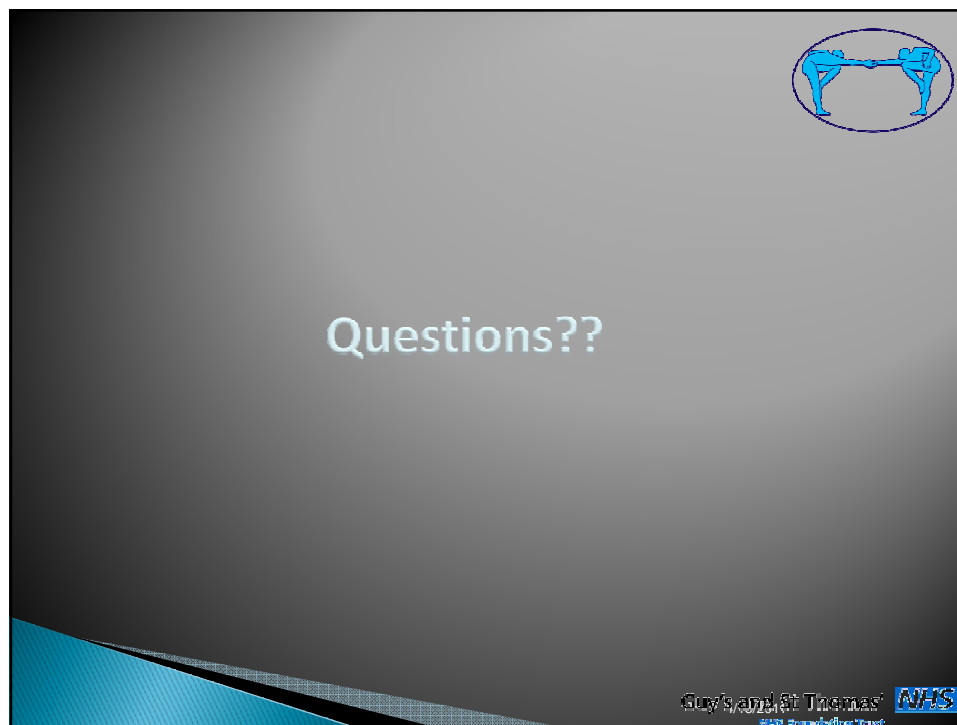
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Limitations

- ▶ No record of STIs diagnosed at different clinics so our figures may be underestimated
- ▶ Information on serosorting/venue related sex/recreational drug use not collected
- ▶ Uptake of screens not recorded

Acknowledgements

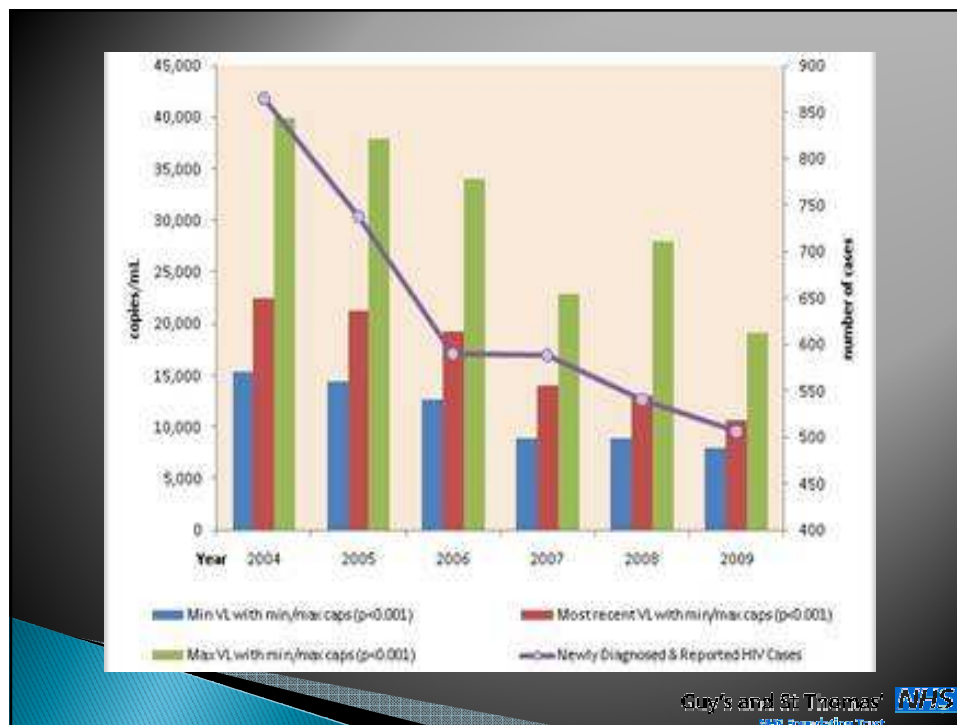
- ▶ Nursing staff at Harrison Wing STH
- ▶ GU Consultants at St Thomas' Hospital : Annemiek de Ruiter, John White, Daniella Chilton



Reducing Community Viral Load

- ▶ San Francisco department of public health prioritized earlier initiation of ARV between 2004-2009
- ▶ Evaluated ALL HIV+ve individuals for ARV
- ▶ Resulted in higher CD4 counts at initiation and reduced time from diagnosis to virologic suppression
- ▶ Decline in community viral load correlated significantly with decrease in newly diagnosed HIV cases

Das M et al CROI 2011 Paper #33, # 1022



Risk Reduction Therapy

- ▶ Behaviour change interventions targeted at primary HIV (PHI) diagnosis in 98 MSM patients
- ▶ MSM with PHI were interviewed at diagnosis and at 12 weeks post diagnosis
- ▶ Received 12 weeks of standard counselling
- ▶ In the 12 weeks post diagnosis 76% of participants eliminated risk of onward transmission entirely with greater condom use and fewer sexual partners

Fox, J et al HIV Med 2009 Aug ; 10(7):432-8

Risk Reduction therapy

- ▶ Cochrane review examined 58 interventions including small group and individual interventions
- ▶ 27% reduction in occasions of or partners for UPAI
- ▶ Most effective were studies with an intervention span ≤ 1 month
- ▶ In community level interventions greatest successes were observed where $\geq 90\%$ were white and studies where the intervention addressed development of personal skills

Johnson et al Cochrane Database Syst Rev. 2008

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