Gonorrhea and chlamydia testing in U.S. HIV-infected men who have sex with men

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BACKGROUND

- 84% of men with newly diagnosed HIV infection in the United States are men who have sex with men (MSM)[1]
- Among MSM tested in sentinel surveillance in 2014, 19% tested positive for *Neisseria gonorrhoeae* (GC) and 15% for *Chlamydia trachomatis* (CT)[2]
- GC and CT diagnosis and treatment among HIV-infected MSM improves their health, reduces ongoing STD transmission, and may reduce HIV transmission
- GC and CT infections in MSM most often occur in the anorectum and pharynx, and testing at extragential sites improves diagnostic yield
- Testing should be conducted at anatomical sites of sexual contact at least annually per U.S. Guidelines[3]

OBJECTIVE

To generate nationally representative estimates of testing and test positivity for GC and CT by anatomical site among HIV-infected MSM in medical care for HIV infection in the United States

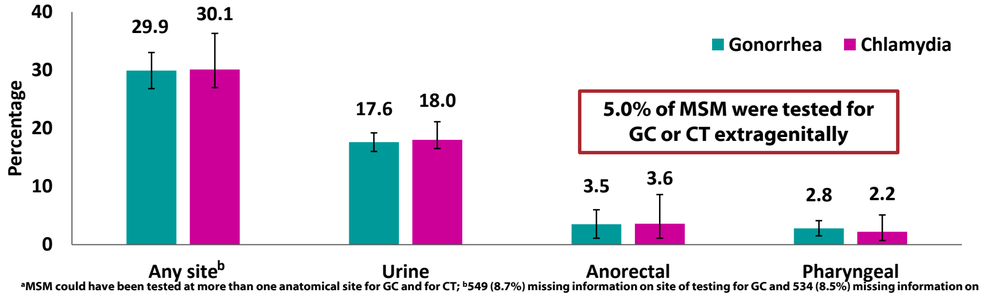
METHODS

- The Medical Monitoring Project (MMP) is a national surveillance system that produces annual, cross-sectional estimates of behavioral and clinical characteristics of HIV-infected adults in medical care for HIV infection
- For the 2009–2012 data collection cycles, MMP utilized a 3-stage design to sample HIV-infected adults receiving outpatient medical care (i.e., states, outpatient HIV care facilities, and patients)
- Data were collected via face-to-face or telephone interviews and medical records were abstracted at the facility from which the patient was sampled
- We used medical record data from the 2009-2012 data collection cycles to estimate the percentage of sexually active MSM who received GC and CT testing in the 12 months prior to interview using standard diagnostic methods
- We estimated percentages and 95% confidence intervals weighted on the basis of known probabilities of selection and adjusted for facility and patient non-response

RESULTS

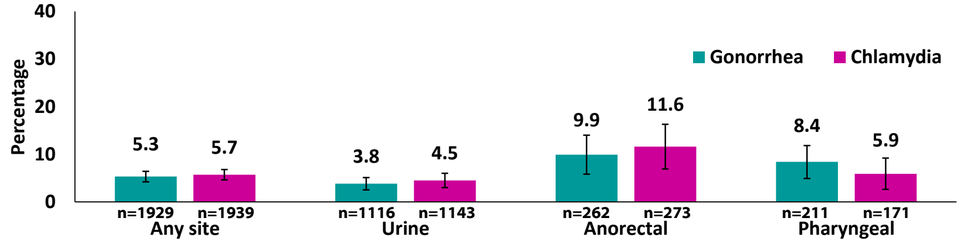
6,079 sexually active HIV-infected MSM were included in the analysis. Median age was 44 years (interquartile range: 36–50), and 50% were non-Hispanic white, 24.1% non-Hispanic black, 20.8% Hispanic, and 5.4% other race/ethnicity.

Figure 1. Testing for *Neisseria gonorrhoeae* (GC) and for *Chlamydia trachomatis (CT)* among HIV-infected MSM receiving medical care – United States, Medical Monitoring Project: 2009–2012 (N=6,079)[a]



[a]MSM could have been tested at more than one anatomical site for GC and for CT; [b]549 (8.7%) missing information on site of testing for GC and 534 (8.5%) missing information on site of testing for CT

Figure 2. Test positivity for *Neisseria gonorrhoeae* (GC) and for *Chlamydia trachomatis (CT)* among HIV-infected MSM receiving medical care – United States, Medical Monitoring Project: 2009–2012[a]



[a]MSM could tested positive at more than one anatomical site for GC and for CT

DISCUSSION

- Testing for GC and for CT per recommendations is suboptimal among HIV-infected MSM in medical care for HIV infection in the United States
- Extragenital testing rate was low and similar to that in prior studies conducted in large urban sites[4,5]
- Similar to prior studies, GC and CT positivity for anorectal and pharyngeal samples was roughly twice that of urine samples[6]
- Sub-optimal GC and CT testing represents missed opportunities to identify high-risk sexual behavior and offer interventions to prevent HIV transmission

LIMITATIONS

- Patients could have received STD testing at other facilities not captured in MMP
- Testing may have not been documented in the medical record

CONCLUSIONS

In our nationally representative analysis of HIV-infected MSM in medical care for HIV infection:

- Fewer than one-third were tested for GC or CT at any site
- Only 5.0% of MSM were tested for GC or CT at an extragential site

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