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Systems Approaches to Improving Rates of Extragenital Chlamydia and Gonorrhea Screening Among Men Who Have Sex With Men Engaged in Human Immunodeficiency Virus Care

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In 2011, there were an estimated 1.2 million persons living with human immunodeficiency virus (HIV) in the United States, of which approximately 478,000 (40%) were engaged in HIV care.[1] Among gay, bisexual, and other men who have sex with men (collectively referred to as MSM), who account for the majority of new HIV diagnoses in the United States,[2] 38% of 245,545 were routinely accessing HIV care.[1] Although the Centers for Disease Control and Prevention recommends that all sexually active persons with HIV infection get screened for curable sexually transmitted diseases (STDs; such as chlamydia, gonorrhea, and syphilis) at least annually as part of HIV care,[3] STD screening rates are suboptimal, especially extragenital chlamydia and gonorrhea screening among MSM. In a review of 8 large HIV care clinics, less than 20% of patients had at least 1 annual extragenital chlamydia or gonorrhea screening test.[4] Among MSM captured in the Medical Monitoring Project surveillance platform, approximately 20% of MSM engaged in HIV care had a documented chlamydia or gonorrhea test in the prior 12 months.[5] In a large cohort of HIV-infected patients engaged in regular HIV care, chlamydia and gonorrhea screening rates increased over time between 2004 and 2010, yet still remained low (39% in 2010).[6]

Men who have sex with men who are engaged in HIV care are actively seeking primary care services with some regularity. Why has it been so challenging to improve STD screening rates among this population of motivated men who are routinely engaging with a provider and health care system? Two articles published in this month's volume of *Sexually Transmitted Diseases* further help us to better understand this challenge. Barbee and colleagues[7] evaluate current bacterial STD screening practices in a large HIV care setting in Seattle, Washington. While nearly 75% of MSM engaged in care at the Madison Clinic had a syphilis serologic test in the prior year, less than one third had either a rectal or pharyngeal chlamydia or gonorrhea screening test,[7] although the majority reported some level of sexual risk that would warrant screening at exposed sites. Furthermore, while a sizable minority reported seeking STD services from the local municipal STD clinic, nearly three fourths reported that the Madison Clinic was their primary source of STD care. Surveyed Madison

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Clinic providers overwhelmingly believed that their patients were getting STD care elsewhere, and many were not aware of current Centers for Disease Control and Prevention recommendations for STD screening or that nucleic acid amplification test-based screening was available in their clinic.

In the second article, Scarborough et al[8] report on a clinic level intervention designed to increase extragenital chlamydia and gonorrhea screening in an HIV care clinic in Oakland, California. The intervention included didactic training of clinic staff, including reporting current STD screening rates, as well as the development of an paper-based risk assessment to be completed by all male patients and then included in the medical record.[8] Clinicians were involved in the development of both the risk assessment and subsequent changes to clinic protocols related to STD screening. After the intervention, overall chlamydia and gonorrhea screening increased from 32% to 40%, with much of this increase attributed to the 45% increase in pharyngeal screening. Urogenital and rectal screening also increased, but not to a statistically significant extent. Although only 50% of MSM HIV-infected clinic attendees completed the risk assessment, overall STD screening rates increased, suggesting that provider attitudes and practices toward screening all of their patients may have been modified.

Increasing rates of extragenital screening among MSM, like all populations, necessitates reducing barriers at the patient, clinician, and systems level. For HIV-infected MSM engaged in HIV care, many of the patient level barriers have been overcome; patients are actively seeking out care for their HIV infections and often are interested in receiving STD services.[9] That leaves clinician and systems level factors as the foci. For many MSM, some of whom believe they are not at high risk for an asymptomatic STD, extragenital screening occurs at the recommendation of their provider. However, as described by Barbee et al,[7] others have reported a perceived lack of time in the clinical encounter for specimen collection and counseling.[10] A study looking at the impact of didactic STD training on clinician practices found that after training, STD-specific knowledge and skills improved.[11] However, barriers such as time and staffing remained impediments to improved STD clinical services.[11]

Perhaps the locus of intervention needs to move beyond the patient and clinician to the system of health care. A recent review found that few patient- or clinic-level interventions were able to effectively improve STD screening, yet structural or systems level interventions were not only more effective but cheaper to implement and more sustainable.[12] Interventions that are integrated into the system of care are less reliant on individual (patient or clinician) perceptions, attitudes, or skill sets. Scarborough et al[8] explored the potential of a limited systems approach by developing a risk assessment collected before the clinical encounter.[8] The risk assessment was integrated into standard protocols for male patients; however, almost half of males seen at the clinic during the intervention period did not complete the assessment. Why didn’t more men complete the survey? Disappointingly, the authors report that the paper-based risk assessments were stopped after their evaluation, although there are explorations of how to incorporate sexual history assessments into the electronic medical record.[8]

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Systems level interventions encompass a wide range of activities. Electronic health record–based or clinical decision support–based interventions take advantage of technologic advances in medicine and clinical care and have been effectively used to improve rates of smoking cessation[13] and appropriate use of diagnostic imaging.[14] The use of standing orders for syphilis serology for all MSM in HIV care receiving CD4 and HIV viral load testing is another excellent example of systems approaches to increasing screening.[15] Scarborough and colleagues[8] mention that the clinic that was involved in their assessment is exploring the use of patient self-collected specimens for MSM, an excellent approach to reducing the needed clinician time for specimen collection. Identification of other novel systems level interventions may be an effective way to increase screening, while limiting costs associated with more individually focused interventions.

System level intervention designed to increase chlamydia screening for younger women and decrease screening for older women have been effective and cost-efficient.[16–20] Although risk factors for infection may differ for MSM and adolescent females, systems level interventions designed to increase screening may function similarly. By focusing interventions at the level of the care system, measurable improvements in the offering and uptake of recommended STD screening may be seen. Rigorous program evaluations should be conducted to inform interventions that work and help identify reasons why interventions fail. Working at the level of the care system, and not individual patients or clinicians, may overcome attitudes and practices that are difficult to change and may impede increasing access to screening.

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