

<sup>1</sup>NYPH, Columbia University Medical Center; <sup>2</sup>NYP, Columbia University Medical Center & Mailman School of Public Health; <sup>3</sup>Columbia University Medical Center; <sup>4</sup>Children's Hospital of Philadelphia

**Purpose:** The CDC has detailed recommendations regarding screening and management of Chlamydia trachomatis infection: sexually active women <25 years old and high-risk men should be screened yearly, tests of reinfection (TOR) should be performed at approximately 3 months, but within 12 months, for those who screen positive, and expedited partner therapy (EPT) can be prescribed or dispensed to those unlikely to seek evaluation and treatment. Although studies have examined effects of EPT, there is limited research looking at TOR for adolescents. To evaluate guideline adherence in our clinical setting, we conducted a QI project to determine chlamydia prevalence and treatment rates, recommendation for partner therapy, documentation of EPT, rates and results of TOR, and missed opportunities for retesting.

**Methods:** Our adolescent clinic is affiliated with a large urban academic hospital and serves a predominantly Latino population. Retrospective review of all chlamydia tests sent between 7/1/08 and 7/1/11 was performed, followed by detailed chart review of positive chlamydia cases. Descriptive statistics were obtained and chi-square analyses assessed the relationship between age, gender, and receipt of EPT on return rates and TOR results. Missed opportunities for TOR were examined.

**Results:** There were 2298 chlamydia tests performed with 177 identified as positive in 152 unique patients (age range 12-22 years, 82.5% female), yielding a chlamydia prevalence of 7.7%. Of those with positive tests, 99.4% had treatment documented; mean time to treatment was 7 days, with 90.9% treated by 14 days. Direct observed therapy was given in 90.3% of cases. Recommendation for partner therapy was documented in 86% of cases but EPT delivery was only documented in 39.5% of cases. Retests were performed in 153 (86.4%) patients; of those, 127 (83%) were sent between 3 weeks and 12 months. A total of 18.3% of retests were positive for chlamydia. Of those not retested by 6 months, 39 (22%) were retested after 6 months, and 24 (13.6%) were never retested. 42.9% of those without TOR by 6 months had been seen by a medical provider but not retested, representing missed opportunities. The majority (85.1%) were seen in primary care, inpatient, or ER settings, with 41 separate visits identified as missed opportunities. There was no effect of gender or partner therapy recommendation/EPT dispensation on time to TOR or results of retest. Upon TOR, 42.9% of 12-14 year-olds had positive chlamydia results compared to 17.1% of 15-22 year-olds ( $p = .085$ ).

**Conclusions:** Two major areas for QI interventions were identified. First, there were high rates of documentation that partner therapy was recommended, but poor documentation of actual EPT delivery. The legalization of EPT for chlamydia in New York State during this period may account for some of this discrepancy, but this is an area for improvement. Our TOR rate revealed missed opportunities for retesting. Additionally, the high reinfection rate in younger adolescents suggests that interventions targeting this age group may be particularly effective. Despite our small sample size, this first-phase study suggests that combined patient-provider interventions to improve documentation, minimize missed opportunities, and increase rates for TOR may increase guideline adherence.

**Sources of Support:** None.

## 8.

### ARE TEEN COMMUNITY HEALTH ADVISORS AN EFFECTIVE TOOL FOR HUMAN PAPILLOMAVIRUS EDUCATION?

Jasmine Pagan, MD, Tara Davis, BS, Yu-Mei Schoenberger, PhD, Renee Desmond, PhD, Mirjam-Colette Kempf, PhD, Tina Simpson, MD, MPH. University of Alabama at Birmingham

**Purpose:** To increase the knowledge base around Human Papillomavirus infections and vaccination among high school students in Alabama using peer sexual health educators known as Teen Community Health Advisors (CHAs).

**Methods:** Before implementing Teen CHA activities during Spring 2012, students at a Birmingham area high school completed a 52-item survey which was comprised of questions from the Health Information National Trends Survey and the Youth Risk Behavior Survey and assessed sexual health behaviors and knowledge. The CHAs then developed HPV educational activities which included class skits, posters, school-wide announcements and incorporation of HPV-related topics into routine peer interactions. The students were reassessed 12 weeks after program initiation for changes in HPV knowledge, HPV vaccination status, and awareness of CHA-related activities.

**Results:** The pre-intervention survey was completed by 359 high school students with 326 students completing the post-survey. The population largely identified as African American (339 [94.4%] at baseline; 308 [94.5%] at follow-up); approximately 60% of participants were female. At baseline, 58.4% reported having heard of HPV compared to 67.5% at follow-up ( $p = .02$ ). After the educational activities, students were more likely to have heard of the Teen CHA program ( $p < .001$ ), have had someone identify himself/herself as a CHA ( $p < .001$ ), report that HPV had been discussed at school ( $p = .006$ ) and acknowledge that HPV is sexually acquired ( $p = .042$ ). More students at follow-up reported that HPV causes genital warts ( $p = .05$ ). While not significant, there was an increase in the number of students who knew that HPV was associated with the development of certain cancers ( $p = .11$ ). At follow-up, students were more likely to have heard of the HPV vaccine ( $p = .007$ ) but not necessarily more likely to have received the vaccine ( $p = .18$ ).

**Conclusions:** These results suggest that peer educators can play an important role in HPV education. While there was no significant increase in the number of students receiving the vaccine within the follow-up period, it is encouraging that there is more dialogue about the vaccine. Ongoing efforts will focus on continued vaccine promotion by the CHAs coupled with policy level changes to facilitate vaccine initiation and completion.

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## 9.

### DO TEENS WITH PRIVATE INSURANCE DECLINE CHLAMYDIA SCREENING MORE FREQUENTLY THAN THOSE WITH PUBLIC INSURANCE?

Krishna K. Upadhyya, MD, MPH, Krupa Bhojani Playforth, MD, Alexandria K. Coughlan, BS.

Georgetown University Medical Center

**Purpose:** Chlamydial (CT) infection is associated with significant sequelae including pelvic inflammatory disease and infertility. The greatest burden of disease is amongst adolescent women. The U.S. Preventive Service Task Force recommends annual screening for women ages 15-25 years as one of the ten most cost-effective pre-

ventive services. Prior studies have shown suboptimal rates of CT screening overall and that privately insured women are screened at lower rates than those with public insurance. Desire for confidential services is known to be common among teenagers, and patient and provider assurance that CT testing can be done confidentially may vary by type of insurance coverage. To our knowledge, no published studies have evaluated whether screening is offered to or accepted by teens at different rates depending on insurance type. We analyzed the rates of CT screening of sexually experienced adolescent women presenting for annual physical. We hypothesized that rates of offering CT screening would be equal between sexually experienced teens with public vs. private insurance, but that those with private insurance would be more likely to decline screening.

**Methods:** A retrospective chart review of all health maintenance visits by women ages 15–19 in an academic medical center serving urban and suburban youth between April 2009 and October 2011 was conducted. De-identified data were extracted to document (i) whether chlamydia screening was offered; (ii) whether it was accepted, and if not, for what reason; and (iii) demographic data including insurance status and age. Public insurance was defined as Medicaid or Medicaid Managed Care Plan. Chi Square test was used to assess statistical significance of frequency differences in screening by insurance type. This study was approved by the IRB at Georgetown University Medical Center.

**Results:** A total of 936 health maintenance visits were reviewed. One third (34%) of visits were made by patients with public insurance. History of sexual intercourse was documented in 399 (38%) of visits. After excluding visits with documented CT screening at a prior visit within 12 months ( $n = 93$ ) and those with STI symptoms (abdominal pain, vaginal discharge, dysuria/ $n = 33$ ), CT screening was offered to 54% of teens with reported history of sexual intercourse. Rates of offering screening were 49% for privately insured and 61% for publicly insured ( $p = .06$ ). Among teens who were offered screening, rates of accepted screening were 83% for privately insured and 97% for publicly insured ( $p < .01$ ). Few providers documented reasons for offered screening being declined. Subgroup analysis by age demonstrated that differences in offering and accepting screening were more pronounced among younger (ages 15–17) compared with older (ages 18–19) teens.

**Conclusions:** Adding to prior research, these findings suggest that differences in CT screening between publicly and privately insured teens are related both to differences in the likelihood of being offered screening by providers and the willingness of teens to undergo screening. Possible explanations for these findings include differential assurance of the confidentiality of testing and different perceptions of CT risk between publicly vs. privately insured teens and their providers.

**Sources of Support:** None.

10.

#### KNOWLEDGE AND USE OF EXPEDITED PARTNER THERAPY BY A SAMPLE OF PEDIATRIC PROVIDERS IN THE TREATMENT OF SEXUALLY TRANSMITTED INFECTIONS

Jessica Reggi, DO<sup>1</sup>, Alison Chase, DO<sup>1</sup>, Cynthia Mears, DO, FSAHM<sup>1</sup>, Tania Kelly, MD<sup>1</sup>, Richard Zimmerman, MA<sup>2</sup>, Larry Roy, MD<sup>1</sup>.

<sup>1</sup>Advocate Hope Children's Hospital; <sup>2</sup>Illinois Government

**Purpose:** To prevent STI re-infection in adolescent patients; to identify the current status of EPT use among pediatric providers; to identify those pediatric providers that are interested in EPT training; to identify barriers to EPT use/implementation. The Centers for Disease Control and Prevention defines Expedited Partner Therapy (EPT)

as the clinical practice of treating sexual partners of patients diagnosed with Chlamydia or Gonorrhea by providing either prescriptions or medications to the patient for his/her partner without the health care provider examining the patient's partner. As of January 1, 2010, EPT is permissible by law in Illinois but is not available in all 50 states.

**Methods:** Our survey was modified from portions of an IL Department of Public Health family planning clinic survey in order to focus on EPT and to address pediatric providers. The developed survey was piloted. The surveys were then distributed to providers (MD/DO, PA, NP, and RN) attending the annual Illinois Chapter, American Academy of Pediatrics (ICAAP) Conference in 2011. Descriptive analysis was performed on the survey data. Provider subgroups were further compared with Fisher Exact testing, using a significance level of  $p < .05$ .

**Results:** Our completed survey response rate was 43% overall. There was no difference between those providers that completed the survey vs. those that did not. When comparing provider subgroups, physicians were found to be less likely to use EPT to treat greater than 50% of positive cases when compared with other practitioners (PA, NP, or RN) (7% vs. 60%;  $p$  value: .03). No statistically significant differences were found for EPT use in hospital vs. office-based practice settings or regarding familiarity of EPT guidelines among physicians vs. other practitioners. STI screening, diagnosis, and treatment is provided by 78% of the surveyed ICAAP providers overall. EPT use among participants is 38%, with only 4% using EPT to treat over 75% of positive cases. Ten percent of those surveyed have participated in EPT training, while 58% are interested in doing so. Barriers to EPT use were primarily provider discomfort in treating a patient who had not been questioned/examined (80%), providing treatment for one STI without further screening (43%), inability to provide partner prescriptions via electronic medical record (43%), confidentiality with respect to insurance explanations of benefits (34%), providers' time (32%), and other confidentiality concerns (25%).

**Conclusions:** Numerous barriers to EPT implementation were identified. Few pediatric providers are using EPT to treat the majority of positive cases. Our study found the most common barrier to EPT use, despite protection under IL law, is treatment of a partner that has not been questioned/examined by the provider. There are also concerns regarding partner STI screening, confidentiality, funding, and documentation (EMR). Additional barriers that the CDC has identified, that our study did not explore, were missed diagnoses of PID in female partners and partner compliance with EPT and follow-up exams. Our survey also identified interest in EPT training. Further research is needed to determine if provider education and development of strategies to overcome these barriers will increase EPT access for adolescents.

**Sources of Support:** None.

11.

#### EPIDEMIOLOGY OF TRICHOMONAS VAGINALIS GENITAL INFECTION IN HIGH-RISK YOUTH

Uri Belkind, MD<sup>1</sup>, Susan M. Coupey, MD<sup>2</sup>, Amy S. Fox, MD<sup>3</sup>, Betsy Herold, MD<sup>4</sup>.

<sup>1</sup>St. Barnabas Hospital/Union Community Health Center; <sup>2</sup>Children's Hospital at Montefiore; <sup>3</sup>Montefiore Medical Center; <sup>4</sup>Albert Einstein College of Medicine

**Purpose:** *Trichomonas vaginalis* (TV), a sexually transmitted infection (STI), is associated with adverse health outcomes including increased risk of acquiring HIV as well as preterm delivery and premature rupture of membranes. However, little is known about the