Methods: Our intervention promoted HPV vaccine with both parents of preteen boys and health providers in 13 south central NC counties, July-September, 2012. The 'Protect Him' campaign included distribution of posters and brochures (English and Spanish) to county health departments (n=13) plus 184 providers, two radio PSAs, a one hour online training for providers and a website. The main messages were: (1) HPV is a common sexually transmitted infection and causes disease, (2) HPV vaccine protects against infection and disease from genital warts and certain cancers; (3) HPV vaccine is recommended for boys at ages 11-12. To assess changes in awareness, knowledge, attitudes, beliefs and vaccination actions, we evaluated the campaign using: 1) two independent, cross-sectional telephone surveys of parents with 9-13 year old boys (pre n=516, post n=455); 2) pre- and post-intervention surveys with enrolled providers; and 3) NC Immunization Registry (NCIR) data to compare vaccination rates in the 13 intervention vs. 14 control counties.

Results: Post intervention, providers reported increased likelihood of discussing (p=.03), recommending (p=.004) and vaccinating (p<.0001) 11-12 year old boys against HPV. Parents with campaign recall (62%; n=284) were more likely to have heard of the HPV virus and vaccine (adjusted OR=5.44 and 9.70 respectively, p<.0001). A Cox proportional hazards model for the NCIR data showed an intervention effect (HR=1.34, p=.0024), as the probability of vaccination increased by 34% in the intervention counties relative to control counties during the three months of the intervention.

Conclusions: This focused, time-limited, low intensity dissemination intervention boosted preteen HPV vaccination. Multiple evaluation strategies provide insight into intervention impact and potential explanatory mechanisms.

Sources of Support: This study was supported by grants from the National Institutes of Health 1R21A1095590-01A1 (Cates PI), and by the North Carolina Translational and Clinical Sciences Institute, through support from the National Center for Advancing Translational Sciences (NCATS), National Institutes of Health, Grant Award Number 1UL1TR001111. The content is solely the responsibility of the authors and does not necessarily represent the official views of the NIH.

28

CAMP INSIDE OUT: A NOVEL APPROACH TO HIV/STI AND PREGNANCY PREVENTION IN FOSTER YOUTH

*Kym Renee Ahrens, MD, MPH*¹, *Stefanie Sugar, DClinPsy*², *Mavis M. Bonnar, BA*³, *Alexis Coatney, BA*⁴.

¹Seattle Children's Research Institute j University of Washington; ²Evidence Based Treatment Centers of Seattle; ³University of Washington; ⁴Seattle Children's Research Institute.

Purpose: Due to past maltreatment experiences and disrupted caregiver relationships, adolescents in foster care are at disproportionately high risk of sexually transmitted infections such as Human Immunodeficiency Virus (HIV/STI) compared with peers. Prior research suggests that effective intervention strategies for foster youth need to address 4 key factors: 1) broad-based interpersonal difficulties with emotion regulation, impulse control, and assertive communication skills, 2) delinquent behaviors resultant from past trauma and impacts on sexual behaviors, 3) maladaptive norms and attitudes regarding HIV/STI/pregnancy risks, and 4) poor condom negotiation skills.

Methods: To fill these needs, we developed Camp Inside Out. We used prior qualitative and quantitative research on mechanisms of HIV/STI risk to develop an innovative intervention for youth in foster care, and pilot test it for feasibility and acceptability. Camp Inside

Out is a 5-day curriculum delivered in the context of an overnight camp which contains HIV/STI/pregnancy preventive curriculum and content from Dialectical Behavioral Therapy (DBT), a therapeutic program targeting emotion regulation and interpersonal skills demonstrated to reduce delinquent behaviors in traumatized populations. The camp format was chosen to address retention issues anticipated by caseworkers, and because camp itself provides an in vivo "milieu" of activities (e.g., campfires, challenge course) in which interpersonal skills can be practiced. We conducted an initial pilot with 8 youth in 2013; a second pilot was conducted with 13 additional youth in 2014. We collected data on intervention feasibility and acceptability and generated basic descriptive statistics evaluating HIV/STI knowledge, psychological determinants of HIV/STI/ pregnancy risk, behaviors, and emotion regulation skills at baseline, 1 month, and 4 months after the intervention.

Results: In 2013, 100% of youth received the full dose of curriculum and participated in baseline and 1 month surveys; 88% participated in a 4 month survey. We received high satisfaction ratings, with 88% of youth indicating that that they would refer a friend and 100% of social workers indicating satisfaction with both the recruitment process and camp itself. Qualitative feedback also suggested high acceptability, e.g.: "I really miss you guys, that was the highlight of my summer" (female participant); "I learned all about relationships and sexual health" (male participant); "He seems more excited about his future [since camp]" (social worker). Pre-posttest descriptive statistics suggested that baseline ratings of HIV/STI/pregnancy related knowledge improved moderately after the intervention (mean proportion of items correct 1/4 29%, 38%, and 36% at the baseline, 1 month and 4 months). Attitudes, norms, and self-efficacy improved at 1 month; effects attenuated for norms and self-efficacy at 4 months. We also found an increase in positive coping skills and a decrease in dysfunctional coping strategies at the 1 month follow up point; the improvement in dysfunctional coping strategies again waned by 4 months. Two of four female participants reported having long-acting birth control devices placed by the 1 month interview.

Conclusions: Camp Inside Out appears to be a feasible and acceptable strategy to reduce HIV/STI/pregnancy risk in foster youth. Additional data is needed to determine intervention effects on sexual risk behaviors.

Sources of Support: This study was supported by NIMH K23: MH090898.

29.

A VIDEOGAME INCREASES HIV RISK-RELATED KNOWLEDGE IN ADOLESCENTS

*Kimberly Hieftje, PhD*¹, *Lynn Fiellin, MD*². ¹Yale School of Medicine; ²Yale School of Medicine.

Purpose: Nearly 40% and 45% of new HIV infections in the U.S. and globally, respectively, are in adolescents/young adults. Videogames are ubiquitous, foster skill development translating into improved health outcomes, and have the potential to dramatically reduce risk behaviors in youth. Behavior change videogames collect ingame data about the players' knowledge and skills, how they change in response to gameplay, and how they correlate with out-of-game data collected. PlayForward: Elm City Stories is an iPad-based videogame designed to increase HIV risk knowledge and decrease risk behaviors. The purpose of this study was to assess: (a) if PlayForward impacted on HIV risk knowledge and (b) how in-game knowledge data correlated with data collected through standardized assessments.

Methods: As part of a large RCT to evaluate PlayForward, HIV risk-related knowledge data was collected through standardized assessments at baseline, 6 weeks (following gameplay), and 3 months. Software-generated logs of player activity were collected through the iPad, measuring exposure to specific intervention components. Coupled with standardized assessments, the data were analyzed for markers of gains in HIV risk-related knowledge. iPad software data were analyzed using the R statistical computing software package.

Results: One hundred and ninety-eight adolescents have been enrolled in the RCT; 55% boys, mean age is 13 years; 161 have completed 6 weeks of gameplay; 125 have completed 3-month follow-up assessments. There were no significant baseline betweengroups differences on a 22-item assessment of HIV risk-related knowledge. After six weeks of gameplay, the intervention group had higher knowledge scores (mean=15 (S.D.=4.8)) than the control group (mean=12.5 (S.D.=4.5); p<0.001) at six weeks and at three months (mean=14.4, S.D.=5.5 vs. mean=12.5, S.D.=4.7; p=0.04). Analysis of 1,289,903 events in log files revealed that the number of game levels completed was positively correlated with knowledge gains measured at 6 weeks (r=0.32; p<0.005) and at three months (r=0.42; p<0.001).

Conclusions: These findings demonstrate that (a) PlayForward increases HIV risk-related knowledge among adolescents and (b) exposure to videogame content is highly correlated with knowledge as assessed by standardized tools used outside of gameplay. These methods are a new and exciting way to capture evidence for real-world knowledge acquisition.

Sources of Support: This research was supported by a grant from the National Institute of Child Health and Human Development, R01 HD062080-01.

PLATFORM RESEARCH PRESENTATIONS VI: HEALTH PROMOTION & TRANSITION

30.

TRANSITIONING ADOLESCENTS WITH HIV TO ADULT CARE: EXAMINING PROCESSES AT TWELVE ADOLESCENT MEDICINE CLINICS

Amanda E. Tanner, PhD¹, Morgan M. Philbin, PhD², Anna DuVal, MPH³, Jonathan Ellen, MD⁴, Bill Kapogiannis, MD⁵, J. Dennis Fortenberry, MD⁶.

¹University of North Carolina Greensboro; ²Columbia University & New York State Psychiatric Institute; ³Johns Hopkins School of Medicine; ⁴All Children's Hospital, Johns Hopkins Medicine; ⁵Eunice Kennedy Shriver National Institute of Child Health and Human Development; ⁶Indiana University School of Medicine.

Purpose: The provision of uninterrupted care as youth with HIV transition from pediatric and adolescent to adult HIV care is essential as disengagement from care has implications for an individual's HIV-related and overall health and with the demonstration that treatment can serve as a means of prevention, the health of the broader community. Accordingly, this study examined the transition processes and protocols that exist across twelve clinics within the Adolescent Medicine Trials Network for HIV/AIDS Interventions (ATN).

Methods: As part of a larger multi-method Care Initiative program evaluation, we completed three annual visits at each site from 2010-2012 and conducted 178 semi-structured interviews (Baseline n=64, Year 1 n=60, Year 2=54) with clinical and program staff

(e.g., physicians, nurses, social workers, case managers). Interview data were analyzed using the constant comparative method with particular attention given to the alignment with the recent American Academy of Pediatrics transition recommendations that include: developing formal written protocols, timelines, and evaluation plans; introducing adolescents to transition early and providing individualized pre-transition preparation with youth; initiating transition between ages 18-25 that includes visits to adult clinics and data sharing (e.g., medical/health records) between adolescent and adult clinics; and the evaluation of transition outcomes for youth (e.g., care engagement and viral loads).

Results: Participants discussed the importance and challenges of transition from adolescent to adult care for both behaviorally and perinatally infected adolescents, highlighted by: "Adolescent care means that we are going to hold their hand a little longer than if they walk into an adult [clinic], the [adult providers] not going to have this patience". The results correspond with AAP transition guidelines. Formal protocols: Sites had varying levels of formal transition protocols – 4 with formal written protocols and 6 with informal but detailed processes influenced by the location of transition (e.g., new physical space, same space with new provider). Transition preparation: Staff focused on life skills development (e.g., medication management, insurance documentation, budget) to prepare youth for transition, Adult clinic connection: Sites used a variety of strategies (e.g., site visits to adult clinics, adult provider working in adolescent clinic one day per week) to connect youth to adult clinics. Transition evaluation: Sites identified necessary components (e.g., inter-clinic data sharing) for evaluating transition outcomes (e.g., appointment adherence).

Conclusions: Creating a seamless transition process for adolescents with HIV is especially important given the intersecting identities and stigmas often associated with the disease. Transitioning HIV-positive youth involves targeting behavioral and biological factors as well as provider and system-level issues. Addressing key factors is essential for developing streamlined, comprehensive, and context-specific transition protocols. Adolescent and adult HIV clinic collaboration is essential to reduce service fragmentation, provide coordinated care, and support individual and community level health.

Sources of Support: This research is supported by NICHD (3U01 HD040533-09S1) with an administrative supplement awarded through funds from the American Recovery and Reinvestment Act (ARRA) of 2009.

31.

MEDICAL HOMES FOR DETAINED YOUTH

Rebecca Monk Beyda, MD¹, Titilola B. Balogun, MPH², Nicole Trojan, MS³, Mona A. Eissa, MD, MPH, PhD².

¹Univeristy of Texas Medical School at Houston; ²University of Texas School of Public Health at Houston; ³Harris County Juvenile Justice Center.

Purpose: Youth in the juvenile justice system are a unique population with complex and varied health needs. Many have undiagnosed or poorly managed health conditions and often lack primary care physicians or medical homes. While guidelines stress the need for continuity of care during and after admission to the juvenile justice system, to our knowledge, no current program exists for transitioning care for detained youth. We conducted a three part needs assessment including detainee and guardian surveys, focus groups, and community asset mapping. The needs assessment