management. We conducted a two-part study using a user-centered design framework to develop PlusCare - a novel mobile application (app) system to support case management of YLH.

**Methods:** YLH between the ages of 13-25 years old and health professionals who perform case management duties with this HIV+ population (CMs) were recruited from clinics at two hospitals serving the metro Boston area. We conducted semi-structured interviews with YLH and CMs to identify barriers and facilitators to the implementation of PlusCare, pinpoint areas to further develop the system, and promote its generalizability across a variety of settings. The interviews were audio-recorded, transcribed, and thematically coded. The qualitative feedback collected was used to enhance the PlusCare app system. Usability testing of the PlusCare prototype was conducted with different YLH and CMs to evaluate user acceptance before live deployment. Participants completed a list of tasks in the app and researchers measured task efficiency and effectiveness. The System Usability Scale (SUS) was used to assess overall user satisfaction.

Results: Semi-structured, one-on-one interviews were conducted with YLH (N=10) and CMs (N=5). Themes from qualitative interviews revealed most YLH and CMs would find an app helpful if it could support medication and appointment adherence and reduce in-person clinic visits required of YLH for healthcare-related administrative tasks (e.g. document signing). YLH reported privacy as their biggest concern in using the app. YLH (N=5) and CMs (N=6) reported above average usability with SUS scores of 82.5 (SD=21.1) and 82.1 (SD=15.8), for YLH and CM interfaces, respectively. These scores exceed the industry standard of an SUS score of 68. Users identified document management, a list of resources available to patients, and HIPAA-compliant lab result sharing as especially helpful app features. YLH completed 10 tasks on the app; managing documents, adding a new care contact, and updating a patient's personal information were identified as most challenging. Of the 13 tasks completed by CMs, the most challenging tasks included registering a patient and confirming a patient viewed their lab results.

**Conclusions:** Findings from this usability study support the design of PlusCare in addressing challenges reported by YLH and CMs such as medication and appointment adherence through SMS and in-app reminders and managing administrative tasks through document management. Further studies are underway to determine how PlusCare affects HIV medical management and health outcomes in real-world clinical settings.

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#### 253.

### SEXUALLY TRANSMITTED INFECTIONS: RISK HAS NO SEXUAL ORIENTATION! A NATIONAL STUDY AMONG YOUNG ADULTS IN SWITZERLAND

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**Purpose:** To assess the characteristics of young adults who reported a history of sexually transmitted infection (STI).

**Methods:** Data were drawn from the Swiss national survey on youth sexual behavior carried out in 2017. Out of 5175 participants (49.0%)

females; mean age 26.3) who completed the questionnaire, 5049 (97.6%; 48.8% females; mean age 26.3) answered the question on STI history ("Has a doctor or other health professional ever diagnosed you with (a) genital infection(s)?"). Participants were divided into two categories: YES (9.7%, n=491) and NO (90.2%; n=4558). A list of the most frequent STIs was then offered. We compared groups on sociodemographic data, current mental health (poor/good), sexual orientation (heterosexual/non-heterosexual), alcohol misuse and cannabis use (last 30 days), number of lifetime sexual partners, age at first sexual contact, having ever experienced casual sex and sexual intercourse while intoxicated (yes/no). We first ran a bivariate analysis and all significant variables (p<.05) were included in a logistic regression using the NO group as the reference category. Results are presented as odds ratios (OR).

Results: Overall, 9.7% of participants reported a STI history, with females (n=328; 13.3%) reporting significantly more frequently than males (n=163; 6.3%). Chlamydia and genital warts/papillomavirus were the most reported STIs for both gender, respectively 38.3% and 33.8% for females and 44.9% and 25.6% for males. At the bivariate level, STI history was associated with female gender, urban residence, poorer mental health, non-heterosexual orientation, alcohol misuse and cannabis use, higher number of lifetime sexual partners, earlier age at first sexual contact, and having ever experienced casual sex and sex while intoxicated. No associations were found for age, education, socioeconomic status or place of birth. At the multivariate level, participants in the YES group were more likely to be female (OR 2.24), to report a non-heterosexual orientation (OR 1.70), to live in a urban area (OR 1.42), to have had more than 4 sexual partners in their lifetime (OR 5.76), to have started their sexual life earlier (OR 0.95), and to have had sexual intercourse while intoxicated (OR 1.36).

**Conclusions:** Almost 10% of our sample reported a STI history, with the prevalence among females being twice on the one among males. The fact that males are rarely screened (contrarily to females in gynecology) may explain part of this difference in STI history report and emphasizes the need for regular screening among young adult males. Our results indicate that STI history occurs mainly among females with a non-exclusively heterosexual orientation. This result is important for public health. If prevention messages and research often focus on non-heterosexual males for HIV and STIs, lesbian and bisexual females are often forgotten. This strategy may risk conveying misconceptions about the exposure of this population to STIs, especially those who have sexual partners of both gender. Overall, prevention efforts must continue to educate youth about risky situations such as substance use and the need for regular screening.

**Sources of Support:** The survey was financed by the Swiss National Science Foundation (grant #162538).

#### 254.

# REACHING AND RECRUITING YOUNG BLACK AND LATINO MSM: UNDERSTANDING EFFECTIVE SOCIAL MEDIA CAMPAIGNS FOR YOUTH-FOCUSED RESEARCH

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**Purpose:** Reaching sexual and gender minority (SGM) adolescents and young adults (AYA) via social media is crucial to the success of interventions in order to reach those who may not access services or be "out" at collaborating agencies or in the community. The PUSH

Study (Providing Unique Support for Health) is a multi-arm HIV prevention study using motivational interviewing and an app to support SGM AYA of color assigned male at birth with medication adherence. One of the most prolific methods for engagement and outreach is social media. Facebook and Instagram ads have yielded a significant number of enrolled participants. A variety of ad customizations have been implemented, and this poster will describe the most effective ads and methods for categorization and analysis.

**Methods:** Bi-monthly ads are customized by style, image content, headline theme, "call to action", and audience targeting. These customizations are clearly defined. Ad style refers to utilization of video or photo, stock image or graphic design, and traditional ad or boosted post. Image content reflects an aspect of the study such as technology, sexuality, or gender. Headline themes are customized to reflect events (eg. Pride, recruitment events), study explanation, or empowerment. The "call to action" button is a feature that prompts the audience to send a message, leave contact information for study staff to follow-up with in a "lead ad", like the study page, or learn more. Audience targeting refers to refining the scope of users the ad is shown to based on online interests and behaviors. Using a consensus approach, the PUSH team reviewed ads for themes among each category of customization. Metrics (i.e. number of clicks, screeners completed) were generated for each category.

Results: Over 16 months, the PUSH study interfaced with 239 AYA via social media outreach. 48 of those indicated their interest in the study, 32 completed screening, and 20 enrolled. The most successful ad campaign yielded six enrolled AYA. This lead ad features an affectionate sexual minority couple with the headline "Be proud! Be YOU. Tell the PUSH Study what pride month means to you." The second most successful campaign produced three enrolled participants. This lead ad features a colorful photo of a duo holding cell phones, with one draped in the pride flag. The headline reads "Sign up to help us test an app made especially for us." The third most successful campaign produced two enrolled participants. This lead ad features another colorful photo of an affectionate sexual minority couple. The headline reads "Give back to the community today by helping CHOP test a health app made for us. Sign up today and receive a text by tomorrow."

**Conclusions:** SGM AYA of color show preference for a social media ad featuring a photo of happy, representative couples, which empowers users to sign up for the study by leaving their contact information in a lead ad. Messaging via social media with potential participants either who leave contact information in the lead ad or who like the post proves effective for screening and enrolling AYA.

Sources of Support: NIH, NIDA

#### 255.

# HIV PRE-EXPOSURE PROPHYLAXIS IMPLEMENTATION FOR ADOLESCENTS: PROVIDER PERSPECTIVES OF MULTI-LEVEL BARRIERS AND FACILITATORS

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**Purpose:** Twenty-one percent of new HIV diagnoses in 2016 in the US were among 13-24 year olds. The epidemic in Illinois mirrors national trends: 23.4% of new HIV cases statewide and 24.9% of new cases in Chicago were among adolescents. Chicago adolescents have one of the highest HIV burdens in the country. In 2012, daily oral pre-

exposure prophylaxis (PrEP) was approved by the FDA as an effective biomedical HIV prevention method for adults (18+). When taken as prescribed, it is >90% effective at preventing HIV. The Adolescent Trials Network (Protocol 113) demonstrated PrEP is safe and well-tolerated among adolescents. In 2018, the FDA approved Truvada for the use of PrEP in adolescents weighing at least 77lbs. This research describes the landscape of PrEP implementation for adolescents in Illinois by utilizing a socio-ecological approach to understanding implementation barriers and facilitators from the perspective of healthcare providers.

**Methods:** As part of a larger program evaluation of PrEP implementation (Chicago Project PrIDE), our team developed and administered a quantitative survey using Research Electronic Data Capture (REDCap), a HIPAA-compliant web-based survey application. Survey topics included an assessment of barriers to engaging and retaining individuals in PrEP care, as well as strategies to promote PrEP uptake and persistence. The online sample was derived from contact information for grantees of the Illinois and Chicago health departments, PrEP service provider directories, and local hospitals, clinics, and family planning providers. The survey was open from July 2018 through February 2019. This project was deemed exempt by the Northwestern University IRB.

**Results:** A total of 70 participants from 42 unique agencies across Illinois completed the survey; 51 respondents reported serving adolescents ages 12-17, representing 33 unique agencies. Prior to the 2018 FDA approval for PrEP for adolescents, 30% of agencies provided PrEP services to adolescents under the age of 18. After the 2018 approval, an additional 13 agencies implemented PrEP services, for a total of 87% of all agencies serving adolescents offering PrEP access to those under 18. Participants reported facilitators to implementation including: developing a protocol in advance of the FDA approval, providing ongoing training and support to physicians, and screening/ linking adolescents with a chief complaint or diagnosis of a STI. The most frequently endorsed barriers impacting PrEP uptake were at the individual level and included adolescents' limited awareness of PrEP (31%), limited experience accessing the health care system (27%), and low perceived HIV risk (20%).

**Conclusions:** PrEP is an effective biomedical HIV prevention option for adolescents that should be rapidly scaled up to reach those most vulnerable to HIV infection. PrEP is discrete and user controlled, providing an option for adolescents who may not be able to negotiate condom use or knowledge of a partner's HIV status. Understanding the current landscape, including barriers and facilitators to implementation, will aid in national roll-out of PrEP for adolescents.

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### RESEARCH POSTER PRESENTATION: SUBSTANCE USE

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### PSYCHOSOCIAL OUTCOMES OF FREQUENT MARIJUANA USE IN ADOLESCENT WOMEN OF COLOR

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