

youth who reported substance misuse were referred to the CFJC-Health Clinic for consultation by the next available clinic day. From June-August 2020, after providers completed buprenorphine waiver training, 81% of youth who reported substance misuse were referred for consultation. From Sept 2020-April 2021, after implementation of a referral and management protocol for opioid use and withdrawal, almost all (90%) of youth reporting misuse were referred.

**Conclusions:** Similar to previous literature, we found that the prevalence of opioid misuse among adolescents at CFJC was significantly higher than in the general population. Our findings demonstrate that two change interventions of provider buprenorphine training and the development of protocols to facilitate the assessment and management of opioid misuse and OUD increased the rate of youth who received treatment for OUD at CFJC. Further refinement of these guidelines is needed to ensure that all youth admitted to CFJC with opioid misuse and OUD receive timely consultation and support to decrease the rate of opioid-related morbidity and mortality in confined youth.

**Sources of Support:** None.

176.

#### A PILOT STUDY TO INFORM THE DEVELOPMENT OF THE PLAYSMART VIDEOGAME INTERVENTION TO PREVENT THE INITIATION OF OPIOID MISUSE AMONG ADOLESCENTS AND YOUNG ADULTS

Claudia-Santi Ferrante Fernandes, Ed.D., LPC, MCHES, NCC<sup>1</sup>,  
Tyra M. Pendergrass Boomer, MEM<sup>1</sup>, Lynn E. Fiellin, MD<sup>1</sup>  
<sup>1</sup>Yale University School of Medicine.

**Purpose:** The U.S. opioid epidemic is a major public health concern. Misusing opioids in adolescence is associated with an increased risk of long-term opioid use in adults. Therefore, preventing the initiation of opioid misuse among adolescents by targeting youth mental health strategies is critical. The purpose of this study was to inform the development of a videogame prevention intervention, PlaySMART, that will subsequently be tested in a large RCT with school-based health centers.

**Methods:** Formative work was conducted through seven focus groups with youth between the ages of 16-19 (n=37), six interviews with treatment providers of individuals with opioid use disorder (OUD) (n=6), one focus group with prevention specialists (n=6), five focus groups with School-Based Health Alliance (SBHA) adult affiliates (n=26), and three focus groups with SBHA youth (n=15) to inform the content of PlaySmart. Salient themes from focus groups/interviews were extracted to ensure relatable storylines, characters, and graphics. The intervention was then pilot tested among adolescents aged 16-19 (N=33) to evaluate gameplay experience. Feedback was then relayed to the game development company to address.

**Results:** Of the 92 who participated in the focus groups/interviews, 71% were female, 47% identified as White, 18% identified as Black, 14% identified as Asian, 13% identified as Unknown, 37% identified as Hispanic/Latinx. Six distinct storyline themes were extracted from focus groups/interviews to inform the content of PlaySmart: supporting a friend in distress, being offered opioids at a party, navigating addiction in a relationship, seeking help for mental health, and effectively communicating with adults and healthcare providers. Specifically, two storylines and one mini-game focused on the promotion of mental health strategies given the salient theme of mental health. Of the participants who pilot tested the intervention, the majority noted "I liked the art and design of PlaySMART" and "Playing PlaySMART

was interesting." Suggested improvements included: fixing key point errors, addressing "music too loud/distracting while playing," and adding tutorials to each mini-game.

**Conclusions:** A central theme in game design was mental health promotion, a key factor in preventing opioid misuse among adolescents and young adults. Overall, adolescents and young adults reported that the intervention was acceptable, informational, and relatable. Suggested improvement focused on the mechanics of gameplay, media, and content that were addressed by the game development company.

**Sources of Support:** NIDA/NIH as part of the Helping to End Addiction Long Term (HEAL) Initiative.

177.

#### IMPROVING THE DELIVERY OF E-CIGARETTE SCREENING AND COUNSELING SERVICES TO ADOLESCENTS

Carmen Chavez, MD<sup>1</sup>, Thaina Rousseau-Pierre, DO<sup>1</sup>, Annie Bu, RN<sup>2</sup>,  
Maria Pilar Gonzalez, MD<sup>1</sup>, Gregory Kenny, MD<sup>1</sup>, Tania Lopez-Pichardo,  
MD<sup>1</sup>, Andres Rivera, MD<sup>1</sup>, Janet Siegel, DO<sup>1</sup>

<sup>1</sup>Pediatric Department, Icahn School of Medicine Mount Sinai at Elmhurst; <sup>2</sup>Elmhurst Hospital.

**Purpose:** E-cigarette use among adolescents increased dramatically over the past decade. In 2020, more than 4 in 10 twelfth-grade students reported ever using an e-cigarette device. Through a previous Quality Improvement project, we increased the screening rate among our adolescent population close to 100%. However, screening coupled with education, cessation resources, and follow-up is essential in better addressing the use of e-cigarettes among adolescents. Our Adolescent/Pediatric Clinics participated in the AAP E-Cigarette and Vaping ECHO (Extension for Community Health Care Outcomes), aiming to improve the delivery of e-cigarette screening and counseling services to adolescents. We aimed to increase to 100% within 6 months, the percent of patients, ages 13-21, who are seen during a well-visit, screened and counseled on the harm of e-cigarettes, and if vaping, presented information on cessation resources with follow-up.

**Methods:** The QI team met monthly and used the model of improvement to create a driver diagram leading to change ideas for each 5 PDSA cycles. To address screening, we added the S2BI screening model for substance use in our EPIC template, added photographs of different vaping devices to exam rooms, and e-mailed providers a video on substance use screening. Ultimately, we changed the screening tool to be self-administered. For educating patients, we embedded in our EPIC note, a smart phrase on "the harm of vaping and substance use," and nurses added information as a dot phrase in the After Visit Summary. To improve cessation and follow-up plans, we embedded a phrase with a smart list generating options for cessation resources and follow-up in the assessment and plan section. We also added local and national resources as a dot-phrase. Charts of all adolescents ages 13 to 21 seen for an in-person well exam during October 2020 and from February 2021 to July 2021 were reviewed for screening for e-cigarette use, education on the harms of e-cigarette use, providing cessation resources, and a follow-up plan for patients who screened positive. Run charts and Statistical Process Control P charts were used to display weekly rates of screening, counseling, and follow-up.

**Results:** 111 patient visits were included in the pre-intervention and 761 in the intervention period. The rate of screening for e-cigarette use remained around 100% pre and post-intervention. The rate of