

Additional factors included party pre-planning, past experiences with law enforcement, and easy access to alternative transportation or post-party housing. Participants described avoiding RWI by observing severe driver intoxication: “They were falling down trying to get in the truck — that was a telltale sign”. They also described the need for “better options”, which more often included rides from sober friends than rides from family or ride-share. Bystander interventions were a common technique to avoid RWI (and prevent DWI) during high school. For example, when asked how they avoided RWI, one participant reported “I’ve stopped several of my friends that have been drinking and I told them they weren’t going nowhere”.

**Conclusions:** As youth return to pre-pandemic levels of social activity, DWI/RWI prevention initiatives should bolster protective and prevention strategies that youth are already using, such as peer-to-peer bystander interventions and proactive planning for multiple transportation or housing options among peers. Youth may benefit from prevention and education efforts that enhance awareness of the cognitive impacts of alcohol and drug use on driving. Future research should identify optimal strategies for DWI/RWI prevention intervention delivery, both during and after high school.

**Sources of Support:** R01AA026313.

### 38.

#### YOUR HEALTH YOUR VOICE: IDENTIFYING DISENFRANCHISED YOUTH AND OPPORTUNITIES FOR CIVIC ENGAGEMENT

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**Purpose:** Studies have shown adolescent and young adult (AYA) participation in voting and other forms of civic engagement is associated with future optimism, increased life satisfaction and decreased health-related risk behaviors. Yet, AYA aged 18-24 are the least represented demographic at voting polls across the US. Recognizing voting and civic engagement may be an important health intervention for this population, we sought to determine factors associated with future voting intention (planning to vote in the next election) among AYA attending an urban adolescent clinic during the COVID-19 pandemic.

**Methods:** We added four voting-related questions (Do you plan to vote in the next election? Did you vote in the last election? Are you registered to vote? Do you want to know how to register to vote?) to our pre-visit questionnaire distributed to all adolescent clinic patients ages 13-26 years. Both before and after the November 2020 election (i.e., July 2020 to March 2021), we collected 634 patient questionnaires; 77% (N=487) were from patients who were age eligible to vote on November 3, 2020. We limited the current analysis to questionnaires from age eligible patients with complete responses of yes or no to all four voting questions (N=258). Using bivariate and multivariable logistic regression we examined associations between voting intention and the following factors: age, gender, race, registration status, voting in last election, and weeks to/from November 2020 election. Age was dichotomized to 17-21 vs. 22-26 years based on Locally Weighted Scatterplot Smoothing and race to Black vs. non-Black. This project was approved by the Johns Hopkins IRB.

**Results:** Mean age was 20.7 years (SD=2.1); 63.2% were 17-21 years. Sixty-five percent were female, 88% were Black, 73% were registered to vote, 48% voted in last election, and 76% had future voting intention. Mean weeks to/from November election was -1.26 (SD=10.2). In

the adjusted model, older patients were nearly 70% less likely to declare future voting intention than younger patients (aOR=0.32, 95% CI=0.14-0.76); males were half as likely as females (aOR=0.45, 95% CI=0.21-0.96). Voting in the last election (aOR=18.63, 95% CI=5.51-62.97) and being registered to vote (aOR=6.12, 95% CI=2.82-13.27) predicted future voting intention. Future voting intention was not associated with race or weeks to/from November election in either the unadjusted or adjusted models.

**Conclusions:** Our findings from a clinic sample of urban AYA point to a subgroup of youth who may be more vulnerable to disenfranchisement. The COVID-19 pandemic introduced new challenges for AYA voting and this study highlighted how providers might harness the health care visit to promote AYA voting. Registration status, one of the variables most strongly associated with future voting intention, is modifiable and easily evaluated during a healthcare visit. Future qualitative investigation will explore the differences in future voting intention by age and gender to identify other factors that may also be modifiable or addressed by adolescent providers in clinical settings.

**Sources of Support:** Thomas Wilson Foundation (PI:Fields), NICHD T32HD052459 (PI:Trent).

### 39.

#### DECLINES IN PREGNANCIES AMONG US ADOLESCENTS FROM 2007 TO 2017: BEHAVIORAL CONTRIBUTORS TO THE TREND

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**Purpose:** Pregnancies and births among adolescents in the United States have dramatically declined in recent decades. We aimed to estimate the contribution of three different proximal changes in behaviors to these declines among 14-18-year-olds over the period 2007-2017: delays in age at first sexual intercourse, declines in the frequency of sexual activity, and changes in contraceptive use, particularly the uptake of long-acting reversible contraception (LARC).

**Methods:** We adopted an existing mathematical model that predicts number of sex acts per year per adolescent female by age, and the proportion of these that entail use of various types of contraception. We parameterized the model using predicted values from regressions based on six waves of the CDC’s Youth Risk Behavior Survey. We determined mean contraceptive failure rates from the literature. We calibrated our model to reported births using data from the National Vital Statistics System and the Guttmacher Institute. Pregnancy-related costs were calculated using both medical costs for all outcomes and costs to society for adolescent childbearing.

**Results:** Changes in the three behaviors (delays in age at first sexual intercourse, declines in subsequent frequency of sexual activity, and changes in contraceptive use) consistent with levels seen in our data resulted in reductions of 496,000, 78,000, and 56,000 pregnancies over the decade, respectively, with total medical and societal cost savings of \$9.7 billion, \$1.5 billion, and \$1.1 billion. LARC adoption, particularly among 18-year-olds, explained much of the improvements from contraception use. The three measures together accounted for 38% of the observed decline in teen births over the